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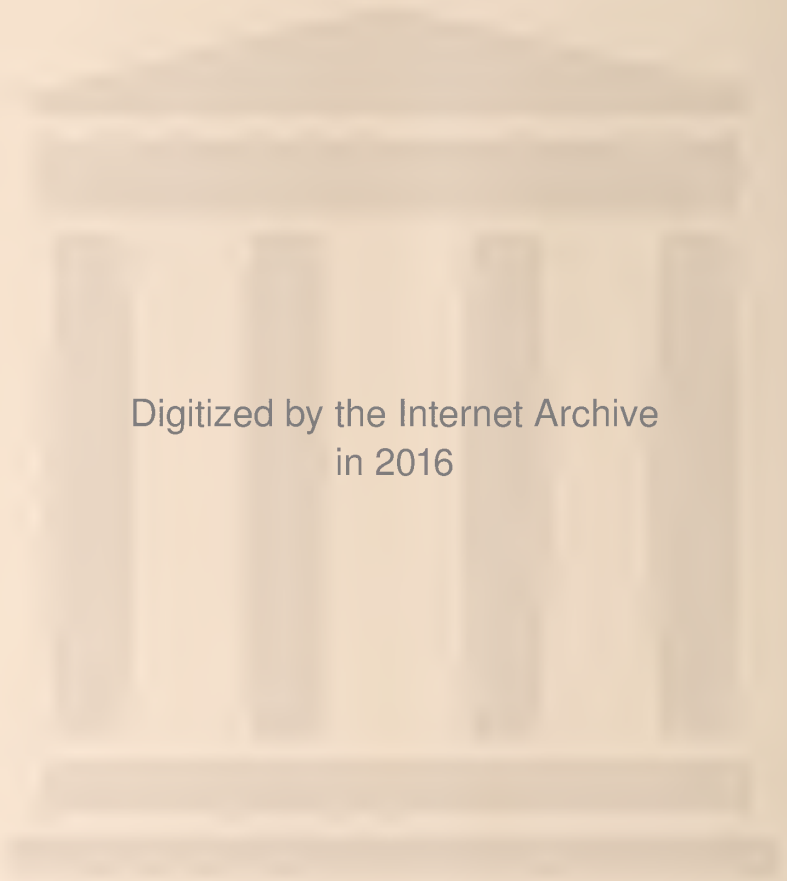
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Original Articles.

MODERN METHODS OF CLINICAL INVESTIGATION IN RELATION TO HOSPITAL ORGANIZATION.

BY HENRY A. CHRISTIAN, M. D., OF BOSTON, MASS.

(Annual Oration, delivered before the Maine Medical Association, at Augusta,
June 29, 1911.)

Maine each summer welcomes to her shores and woods thousands of visitors, and so hospitality has grown to be one of Maine's natural qualities. The visitors are sure of a welcome, and so they come eagerly. Such were my feelings in accepting the invitation of your committee to give the Annual Address in Medicine, an honor which I very highly appreciate.

To all of you, it is very evident that great upheaving forces are at work in medicine. In our medical journals, at our medical meetings are discussions of medical teaching, medical investigation and medical practice. Already very vast changes have been wrought, and many more are under discussion. May it not be profitable for us to pause and ponder why these changes and what their effect on some parts of our medical organization? These forces must be very fundamental in their nature or else they would not stir our medical body politic from center to circumference as they do. Reviewing the situation it has seemed to me that the primary cause of all these changes lies in our modern methods of medical investigation. These methods have changed greatly, and we are now in process of adjusting our medical organization to these changes and seeking an elasticity to fit the continuing changes that we anticipate.

Let me illustrate these modern methods of clinical investigation by comparing the old with the new, and, not to be too tedious, let me confine my attention to two subjects of investigation, cardiac and renal disease. Let us turn back the dials of time a hundred years and review briefly the state of knowledge of heart and kidney possible to our forefathers at the end of the first decade of the XIX century. How limited then was their

outlook, how meagre their means of observation. Cardiac percussion was in its infancy, cardiac auscultation untried, albuminuria and œdema had not been definitely associated with renal disease; clinical observations yielded relatively few facts that could be harmonized with a post mortem study based almost solely on macroscopic appearances. A half century of progress brings us to 1860. Better means of clinical observation making possible the statistical method, largely perfected by Louis, and improved pathological technique under the stimulus of Virchow's theory of cellular pathology had greatly widened the horizon of the medical investigator. Cardiac areas and cardiac murmurs could be observed during life; urinary analysis had been refined to a more minute morphological study and a not very crude chemical examination. The post mortem table, however, served as the supreme judge of the correctness of clinical observation; and clinical observations, corrected by dead house inspection, were accumulated to furnish us a knowledge of disease that in the end was based on the average findings in a large number of, from the present point of view, superficially observed cases. Cardiac and renal diseases were very largely interpreted in terms of end processes and there resulted the therapeutic nihilism of the pathologically trained clinician who dominated the field when the teachers of most of you were acquiring their medical knowledge.

Thirty years more of advance brings us to that fertile period of the discovery of the bacterial causes of many diseases, and that rapid development of surgical technique which has added to our earlier pathology the results from the study of living pathology. Neither bacteriology nor surgery have thrown much light directly on the field of cardiac and renal disease, but they have helped to change our methods from a narrow morphological to a broader functional study, utilizing the results of refinements of clinical observation in conjunction with animal experimentation.

In this span of 80 years two methods have yielded us the largest knowledge of disease, the statistical method of case study and the post mortem examination of end processes. We have busily accumulated case records in our hospitals, and from them deduced the type picture and its variants for many diseases. A casuistic accumulation has instructed us in many and certain rare symptom-complexes. Extensive and valuable indeed has been the contribution to knowledge from these methods, and no one would deny that in the future they will continue to add to our understanding of disease. Still it is very sure that their day of greatest productivity is past, and we must seek in newer methods of investigation to do for our generation what our forefathers did for theirs. Such methods are already being applied in the study of the two conditions we chose as illustrations, so let me review some of the work now being done on these subjects, as examples of the newer methods.

In cardiac disease the clinician, in addition to such data as he has obtained in the past by his senses, aided by simple mechanical devices, i. e., by inspection, palpation, auscultation and percussion, is seeking with complicated apparatus other facts in regard to heart function. The perfection of various mechanical devices for recording, has enabled him to inquire into the condition of different functions of cardiac musculature and into the relation of the various parts of the heart, each to the other, during the cardiac cycle. Not alone contractility, but conductivity, irritability, rhythmicity, and tonicity of heart muscle are investigated in relation to cardiac activity.

The polygraph and other apparatus of this type yield simultaneous tracings of cardiac, arterial and venous pulsations from which have come a greatly increased knowledge of cardiac arrhythmias, and a better functional conception of those very important cardiac conditions usually grouped together as cases of chronic myocarditis. These methods, combined with minute study of cardiac architecture and experimental injury of definite portions of the heart muscle, have given us a conception of the conduction system of the heart, the anatomy of the so-called His bundle, and the effect of lesions located in this part of the heart structure. A thorough understanding of certain forms of bradycardia and heart block have resulted, and some toxic actions of digitalis and other cardiac drugs can be better understood as the result of these investigations of the conduction system.

The perfection of a very delicate galvanometer, the string galvanometer of Einthoven, has put into the hands of the clinician a means of examining a hitherto uninvestigated part of the cardiac mechanism, that delicate change in electrical potential which accompanies muscle contraction. With a patient in the ward connected by wires with a laboratory, even at a distance of a mile or more if necessary, permanent record may be made of the waves of excitation that accompany contraction, and observations of variations in these as they occur under pathological conditions are giving us new information about cardiac function in health and disease.

The Roentgen ray and the orthodiagraph have thrown new light on the size and position of the heart in the thorax under varying conditions. Tonicity of heart muscle is seen to have an important part in cardiac function and diastole as well as systole comes to be of clinical interest.

Experimentally in animals we are able by instrumental means to produce various valvular lesions and to investigate their effect on cardiac function. Experimentally with drugs we have succeeded in producing myocarditis and pericarditis and have followed the histogenesis of these conditions from period to period of their development.

In a similar way new methods have been applied to the study of renal function. The natural disease in man has been investigated by elaborate chemical studies of food intake and urinary output. The effect of varia-

tions in foods have been followed in the urine composition. More intelligent feeding of patients has resulted and therapeutics have been improved because of a better knowledge of drug action in man coming from such minute study of nephritic cases. Experimentally produced nephritis in animals has taught us much about renal functions.

However, it is needless to multiply examples, for already it is very evident to you that these newer methods of clinical investigation demand the skilled use of delicate and complicated apparatus, the ability to carry out elaborate chemical and physiological technical methods and the concentration of time in the very careful investigation of a few patients rather than the cursory study of many. From these methods of clinical investigation have come newer methods for the clinical examination of patients, which are constantly demanding of the physician better preliminary training and better medical instruction. The newer methods of clinical investigation thus have been factors in bringing about these changes in medical education which are sweeping over the country, and in which we all are keenly interested.

What have been their effect on hospital organization? In considering hospital organization it is necessary to keep in mind the several types of hospitals and their functions. We must recognize that there are large hospitals and small hospitals, general hospitals and special hospitals, convalescent homes and sanatoria general and special, partly or entirely public charity organizations. Then there are public, pay or private hospitals, and proprietary hospitals in the sense that the latter are owned and managed by single physicians or small groups of physicians, all of this type intended as places for pay patients and expected to yield a profit or at least not be run at a financial loss. Then of course some hospitals represent a mixture of these several types.

It is the general hospital managed as a public charity that I wish to consider in relation to its organization. What is the function of such a hospital? Is it merely a place to furnish board, lodging and medical service to the deserving poor? That it has a function broader than this is now so generally conceded that I will not interpolate any arguments for this thesis, but assume that you recognize that the function of a public charity hospital is partially remedial, partially educational; it treats the sick and it educates physicians, nurses, and medical students, and in doing both seeks to advance medical knowledge that succeeding generations may profit thereby.

The very complexity of method used in modern medical investigation, as already pointed out, demands a highly specialized training and continuity of observation for investigators, and in addition a large variety of apparatus and trained assistants if advance is to be made. The time element

enters to make impossible the application of such methods to more than a relatively few patients at any one period. Consequently the trend of modern clinical investigation is more and more towards the most minute continuous study of a few patients rather than the cursory observation of the many. Team work and coöperative coördinated observation becomes increasingly important, and hence the necessity of a centralized staff organization. As a result of the influence of present methods of clinical investigation there has come the feeling that for the hospital in which medical investigation is to be conducted, a continuous service with a single head is a more advantageous unit of organization than the older method of broken service with three or four chiefs of coördinate rank on duty during the twelve months. If we examine critically the hospitals of the world with reference to their productivity in investigation, it seems quite certain that productivity is most marked in those that have used the continuous service plan. This plan has prevailed more generally in Germany than elsewhere, and I think all of you will concede that no country has equalled Germany in productivity in medical investigation during the past quarter century.

How does such a continuous service affect the other functions of a hospital? Is there better teaching with a continuous than with a broken service? Can better men be attracted to the one than to the other? The teaching function of a hospital is, in large part at least, utilized in connection with a medical school and staff selections should be made in co-operation with medical schools, thereby securing better men for the work. The continuous service in connection with a teaching position in a medical school is considered more desirable than the broken service, inasmuch as it singles out one man as director and leader, and concentrates in him the emoluments of the position. Abler men will naturally seek such a place and selection need not remain local, as was the case with the broken service. The ability to pick the best man where he may be is certainly desirable from the pedagogical view point. In fact, it is almost alone in the clinical branches of medicine that the limitations of local selections are tolerated in the choosing of teachers. If in all other branches of educational work the best teachers can be secured by a non-local competition, why not in clinical medicine, surgery, etc.? It seems to me that no argument is needed for this, and hence, if the continuous service makes possible the selection of a clinical teacher from the country at large instead of simply locally, it follows that the continuous service will improve medical teaching by attracting better teachers and thereby improve the teaching function of the hospital in so far as it applies to medical students and house officers.

But how about the patients, you ask? Do they get better treatment in a teaching hospital with continuous service? What greater stimulus to do

your best in diagnosis and treatment than the watchful eyes of a group of critical students, I ask? A committee of the Overseers of Harvard University, in a recent report referring to a hospital for medical investigation state, "In this hospital a perfect fidelity to the individual patient is found to be entirely consistent with the use of every case as material for assiduous and minute study. In other words, that hospital which is most wisely utilized for the continuous study of diseases and of the means of preventing and treating diseases should also be the hospital which is most successful in the treatment of the individual patient. Accordingly, hospitals are contributing more and more to medical teaching of the individual sort, and are finding that this development tends to improve and animate their whole curative or remedial function." A little later in this same report they sum up the advantages of a continuous service as follows: "All medical and surgical research profits by continuity through long periods, and each particular research ordinarily needs the direction of a single mind, acting through a long period of time. This continuity is especially needed when some disease is to be studied through a series of individual cases under close observation in a hospital. The practice of shifting the visiting physicians and surgeons in a hospital once in three months or four months is detrimental to the desirable continuity of clinical observation. The arguments for continuous service, instead of divided, are very strong: first, that better service can be given to patients under this system; secondly, that the hospital can do better teaching provided that the physician or surgeon who is giving continuous service is selected in conference between the trustees of the hospital and the authorities of a medical school; and thirdly, that with continuous service the hospital has a better chance of contributing, through its chief physician or surgeon, to the progress of medicine or surgery."

I have not mentioned the training of nurses, in as much as it seems almost self-evident that the form of organization which gives to the hospital the strongest possible staff, and to the patients the best treatment, is the one which will yield the nurse the best possible training.

Is this form of hospital organization suitable for other than large general charity hospitals associated in medical teaching with medical schools? I think it is. Such hospitals have their teaching functions, though there may be no students of a medical school in attendance, and this function is favored by the system. Patients likewise are apt to be better cared for. If with the continuous service provision is made, and it should be, for the relatively early retirement of the chief-of-service, a powerful stimulus is given to the junior members of the staff to do their best work, inasmuch as the position of chief-of-service goes not by seniority but to him who shows greatest capability, and it is a position, that of chief-of-service in any hospital in any community, well worth winning.

That a continuous service in the hospital not connected with a medical school is the one likely to yield a maximum of hospital efficiency is well shown by the success of some private hospitals organized on this plan, and particularly as exemplified in the international reputation of the clinic of the Mayos at Rochester, Minnesota.

Personally I feel very strongly that the single-headed continuous service is to-day the type of unit organization for hospitals which should be applied in very many of our hospitals, and when applied will greatly add to the efficiency of these hospitals. Hospital reorganization along these lines is taking place in many parts of the country, in my opinion, because the medicine we practice to-day is inherently different from that practiced by our forefathers, and this difference in clinical investigation and in clinical practice renders such changes almost necessary if hospitals are to keep pace with medical advance.

I have ventured to bring this to your attention, not because it is my belief that every hospital should be organized on this basis, but because I feel certain that for many hospitals it is the best form of organization. Few towns now are without their hospital, so most of you have some interest in hospitals. Medicine is changing and it will profit us to pause to think whether the hospital in which we are interested is organized to keep pace with these changes, and profit most by the progress of medicine. All of you are interested in medical education and can join with me in the fervent hope that hospital organization throughout this country may be perfected so as to give to future physicians the best possible training, in order that your successors in the Maine Medical Association and their fellow practitioners in this country may stand in the forefront of the world's medical men, furnishing to their fellow citizens an ever increasing knowledge for the amelioration and prevention of disease, that there may be a continued improvement of the daily lot of all Americans, be they rich or poor.

PROSTATIC CONCRETIONS AND CALCULI.

BY F. B. LUND, M. D., OF BOSTON, MASS.

(Read before the Knox County Medical Society, May 8, 1911.)

In a considerable number of prostatectomies I have never met until this winter the conditions known as prostatic concretions and prostatic calculi. This winter in the service at the hospital and outside I have had three cases illustrating these conditions, which have proved so interesting to me that I have felt that a brief consideration of them might interest this Society.

In the first place as to prostatic calculi. There are three kinds of calculi which various writers call prostatic calculi. First, calculi which escape from the gall bladder and lodge in the prostatic urethra or in pockets thereof, where they remain, cause irritation and may increase in size. These are not prostatic calculi at all but urethral calculi which happen to lodge in the prostatic urethra. They should be left out of consideration.

The second class, sometimes called prostatic calculi, are calcifications of the prostate which result from tuberculosis of that organ, which may in its late stage become calcified.

The true prostatic calculi develop in the glands and ducts of the organ itself and the method of their origin is a very interesting one. In prostates from patients at all periods of life examined, there are found curious little microscopic hard bodies formed in concentric layers and giving a starch reaction to iodine, hence called corpora amylacea. They are believed to be a sort of sediment formed from the prostatic secretion and believed to be deposited on dead epithelial cells as nuclei. Upon these bodies becomes deposited a sort of solid fatty material called lecithin, which is a constituent of blood, seminal fluid, white of egg and other tissues of the body. In this way, minute solid bodies are produced which may be reddish or dark brown in color and are called prostatic concretions. The more minute ones may become conglomerated together to form larger concretions, so that they may exist throughout the glands and ducts of the prostate, these little hard concretions, in very great numbers. They may be the size of a split pea or of the various small sizes of bird shot down to No. 10, and so on down to minute black dots. They may frequently exist in the prostate in large numbers without causing any symptoms and are only found when the prostate is removed for obstruction due to hypertrophy or other reasons.

A case of this sort is reported in Case 1 of this paper, in which it will be noted that the presence of concretions was not suspected during life and may have had no effect upon the symptoms or the results of the physical examination, although it is possible that the prostate was somewhat more indurated as a result of their presence, which must have caused inflammatory edema, and may therefore have led to the suspicion, which was very distinct in Case 1, of malignant disease.

CASE 1. J. D., aged 69. Had for years suffered from frequent micturition both day and night. The urine dribbled from him and was very frequently passed in the day time. Rectal examination showed a large, nodular hard mass in the region of the prostate. Cystoscopy by Dr. Binney showed slight trabeculation of the greater part of the bladder. Trigone elevated and superficial blood vessels somewhat injected, but no cystitis present. There was but little projection of each lateral lobe and less projection posteriorly. Cystoscopic diagnosis and rectal examination were thought to be

consistent with malignant prostate. The prostate was enucleated through a median perineal incision. It was very adherent to the capsule and was enucleated with great difficulty. Large numbers of little, black prostatic concretions were expressed from it in taking it out, and the specimen which I show, shows these innumerable little black concretions following the lines of the ducts in the glandular tissue. In this case, there was nothing special about the symptoms to suggest the presence of concretions, although it is possible that the inflammatory hardness, which was mistaken for cystitis, was due to the infiltration of the tissues consequent upon the irritation of the little stones.

The largest of these concretions were the size of about a No. 8 bird shot, and they were of all sizes down to the finest dot. In certain cases, however, the presence of these concretions may cause irritation and abscess formations. These abscesses may grow large and occupy almost the whole of the prostate, which becomes softened as they progress. They may then burst into the rectum or into the perineum or, on the other hand, they may cause small abscesses which, surrounded by inflammatory edema, may cause a prostate which is in reality small and fibrous, to become so enlarged as to cause marked obstruction, pain and dysuria. Such a case is Case 2, which is as follows :

CASE 2. T. M. P., aged 65. For two or three years had suffered from frequent and urgent micturition and for three months attacks of retention. He has recently had to pass his water two or three times at night and five or six times in the day time. Rectal examination showed what felt to be an enlarged, smooth prostate. On February 7th, I enucleated his prostate through a median incision and found that the prostate itself was very small and fibrous, but all through its substance there were numerous prostatic stones of various sizes, from that of a millet seed to that of half a split pea. The capsule of the prostate was edematous and it appeared that a good deal of the present size was due to infiltration about the stones. The stones were reddish in color and a good many of them faceted. Unfortunately, they were almost all lost sooner or later, and the only one I have is one of the smaller ones imbedded in a very small portion of the prostate. The pathological diagnosis was, chronic inflammation with a small abscess at one point.

The stones in this case were found lying free in the prostatic urethra and distributed up through the glands and ducts of the prostate. They were undoubtedly the cause of the little abscess, and had it not been for their presence the prostate itself would not have caused any obstruction whatever. The chronic inflammation due to the abscess made the operation a difficult one.

These prostatic concretions, however, may and sometimes do become the nuclei for the deposit of mineral substances, chiefly, phosphate of lime and triple phosphate, with a little carbonate of lime upon their surfaces, these substances being derived from the prostatic secretions and building up upon these little concretions as a nucleus, large irregular shaped stones which are white and show a radiating structure on section. These stones, as do the simple concretions, cause marked irritation and frequent absorption of the prostate tissue, until we have nothing but a collection of stones lying in a bag of pus which consists of the capsule of the prostate. On feeling of this by the rectum, one gets a sensation of crepitus from the grating of the stones against each other.

On the other hand, these calculi may be branching affairs extending through the various ramifications of the glands and ducts and, as in the former case, surrounded only by inflammatory tissue. The surface of the stone may extend up into the ejaculatory ducts and be felt in the prostate by a sound as it passes the prostate urethra. Case 3, is a case of this sort in which the diagnosis was made by Dr. C. M. Whitney, who felt the beak of the sound scratch the stone as it passed the prostatic urethra and could feel no further grating after the sound had entered the gall bladder and correctly made the diagnosis of prostatic calculus. Prostatic calculi which extend up through the ejaculatory ducts and into the urethra, present the characteristic symptom of pain accompanied by a little blood at the end of the micturition. This symptom, however, does not distinguish them from the urethral calculi in the prostatic urethra. The account of the third case is as follows :

CASE 3. P. B., aged 63. Had gonorrhœa at 20, and 14 years ago had a stricture through which sounds had to be passed. A few years ago he had acute retention. On the morning after the first attack, he passed a little brown stone the size of the head of a pin. He had had a burning sensation in the testicles and urethra, off and on, until eight months ago. The size of his stream is fair and varies at times. Last summer, he noticed some blood at the end of micturition. His urine was thick and bloody. Patient states that sometimes while urinating the stream suddenly becomes smaller and feels as though something blocked the passage. He was examined by Dr. C. M. Whitney who found a very hard prostate and felt a grating with the sound just as the beak of it passed the prostate. After going by this point nothing could be found in the bladder. On the basis of this examination, Dr. Whitney made the diagnosis of prostatic calculus. It will be seen that the symptoms of this case beautifully bear out that diagnosis. The blood at the end of the micturition, burning sensations in the testicles and urethra, are symptoms frequently found in this condition.

About ten days ago, by rectal examination, I found a very hard, not much enlarged prostate. The stony hardness to me suggested malignant disease. About ten days ago, I made a median dissection of the perineum, preliminary to which I attempted to introduce a large staff in the bladder but could not get it in. I then dissected on a staff passed into the prostatic urethra, opened the urethra back of the bulb, introduced a tractor, and on opening the capsule of the left lobe of the prostate, struck a mass of calcareous material. The left lobe and right lobe were occupied by this calcareous material, some large and small fragments of which you may see here. The stone was surrounded by granulation tissue. The pathological report was, prostatic calculi with chronic inflammation. In scooping the deeper parts of the stone with a curette, I punctured the rectum, to which the stone lay very close. It was sutured. The suture gave way after five or six days and there was a discharge of feces through the wound, but this has now ceased and he is passing his urine through the penis and his feces through the rectum and is in excellent condition.

The lesson I should draw from these cases would be that prostatic concretions are frequently associated with infiltration of the prostate, which makes a small, fibrous organ feel larger than it really is by rectal examination and may lead to the suspicion of malignant disease. In removing large calculi from the prostate, remember that they are surrounded by pus and inflammatory tissue and that special care must be taken to avoid injury to the rectum, the wall of which may be just right to perforate at the time of the operation.

THE BORDERLAND OF MEDICINE AND SURGERY.

BY HENRY F. HEWES, M. D., OF BOSTON, MASS.

(Read before the April Meeting of the Cumberland County Medical Society.)

There is no class of conditions in medicine which demand so much careful consideration and deliberative judgment on the part of the physician, as regards their diagnosis and treatment, as those which, being susceptible in separate cases of cure by the methods of both internal medicine and surgery, are included in what may be termed the borderland between medicine and surgery.

There are several diseases of the alimentary tract which belong to this class of cases. Most prominent among these is duodenal ulcer. This condition is, as you know, in some cases cured by therapeutic methods of internal medicine. In other cases this method fails of cure and this satisfactory result is obtained by surgical methods of treatment.

We have where the existence of such a method is indicated or suspected, not only as in the case of all diseases, the question of accurate diagnosis and the permanence of a definite line of treatment indicated for all cases of the disease, but also, the task of discriminating, in the particular case in question, which of two definite lines of treatment is indicated, medicine or surgery.

The point which I wish to consider is, whether and how it is possible for the physician to discriminate in his cases of duodenal ulcer, between those in which surgical treatment is indicated and those in which internal medicine should be used. Should we try medicine from the start and apply surgery only where medicine fails of cure, or may we say that while medicine is to be used in some cases, there is a type of cases in which, once it is recognized, surgery should be used from the start.

The diagnosis of the condition depends very much on the history of the case, lasting often over a period of years. In many cases this history is so typical, that one cannot doubt the diagnosis without further investigation. In addition to this history, which is, though sometimes distinctive is often not distinctive and misleading, we have as an aid to diagnosis certain physical findings which are often of great help. These should always be investigated, whatever the history. They are often in combination with the history of very positive value in diagnosis.

Such findings are the existence of gastrectasism, or of hypersecretion, as determined by the use of the stomach tube. Also in some cases the finding of blood in the feces of occult bleeding as determined by the guaiac test. It is the physical findings that we may get a sign for diagnosis at the start, of the existence of the type of cases which demand surgical treatment for its cure.

The sign is the existence of stasis. In duodenal ulcer, where a chronic condition of stasis exists, surgery is indicated. Such cases may be relieved by medical treatment, but they are not cured. The obstruction must be removed, or the outlet of the stomach facilitated for cure. This stasis in duodenal ulcer may be macroscopic or microscopic only. It may be a constant or only an occasional finding. When found it means operation.

I do not claim that such cases of duodenal ulcer are the only ones which may need operation. There are cases without stasis which may finally demand such procedure. But they are the cases which surely need it. The finding of stasis is not of course a pathoneumonic sign of duodenal ulcer. Ulcer of the stomach at the pylons, cancer at the pylons, and some other conditions may show stasis. But in cases where the existence of duodenal ulcer is indicated by the history, stasis and of hypersecretion are confirmatory signs of the diagnosis and stasis is a sign of operation.

CHRONIC ALCOHOLISM.

BY FRANK E. LESLIE, M. D., OF ANDOVER.

(Read before the Oxford County Medical Association, December 26, 1910.)

In writing a paper for presentation before a County Society it is well to keep in mind that its object is to incite discussion and after-thought more than to instruct. Indeed, it is but rare for any of us to be originators, and while we can all be instructors in our small way, it is by reviewing well known facts rather than by stating any new or original facts. Thus it will be understood that no claim of originality is made in the following treatise.

Alcoholism is a problem which has existed since the dawn of human history, but its recognition as a disease and its systematic study and treatment as such, belongs to very recent times. Indeed, one of the first physicians in the world to recognize its pathological nature, was Dr. Benjamin Rush, of Philadelphia, who, in 1775, wrote a treatise on the Pathology of Alcoholism. Dr. J. Edward Turner, of New York, in 1847, first started an organized movement for the sanitarium treatment of alcoholism, but it was not until 1858 that his labors resulted in the New York Legislature establishing at Binghamton a state institution for the treatment of alcoholism. During the struggle for the public recognition of the need of such an institution, Dr. Valentine Mott, of New York, said, "In my professional life of over 40 years, I have accumulated facts enough to prove beyond all doubt that inebriety is a disease affecting every membrane, tissue and nerve of the human mechanism, producing in its victim a compound fracture from the crown of his head to the sole of his foot, as well as a mental and moral dislocation."

Regarding alcoholism, then, as a definite disease, a brief review of its etiology will be of interest. Rybakoff of Berlin, in an exhaustive study of the subject, found that in 94 per cent. of all alcoholics there was an hereditary predisposition to drink or to nervous or mental disease. He found that drunkenness in one parent usually leads to mild forms of drunkenness in the children, while the same condition in both parents, as a rule, descends in a severe form upon the next generation. He believes that we, as physicians, should prescribe alcohol always with great care, having constantly in mind an hereditary predisposition.

As to the pathological classification of alcoholism, it is now conceded by our most eminent authorities as primarily a neurosis. Osler refers to it as a psychosis and one of the important elements in the strain which leads to mental breakdown. According to Savage of London, of the 1,400 inmates of the Bethlehem Insane Hospital, 133 showed drink as the cause of their insanity. I would like to mention two cases of alcoholic insanity

which seem rather interesting. During the winter of 1905, with another physician, I drove 44 miles to a logging camp in Magalloway Plantation, to examine and commit an insane sailor. There was a history of a series of prolonged drunks, the last of which ended a month before and following which he became permanently insane. He had wandered inland over a hundred miles, and the picture of this man in his sailor togs, trying to furl sails and climb masts in a logging camp, was, to say the least, unusual. The second case was that of a cook in a camp located in Cambridge, N. H. During the fall of 1909, he developed suicidal mania after a spree. With a butcher knife he slashed his neck twice, neither cut being deep enough to be fatal. Sixteen stitches in one and twelve in the other wound were necessary to re-establish his anatomical contour. He also stabbed himself twice over the heart, the knife each time hitting a rib. Here again four more stitches were added for good measure and he recovered nicely from these wounds. In the after treatment I cautioned him against another drunk, predicting that he would again try suicide. Sure enough, a few weeks ago he placed a 38 revolver under the lobe of his right ear and fired, the bullet passing below the right eye, destroying all the bony structures of the nose and the left eye and passing out directly over the left orbit. He is making a nice recovery, with the loss of one eye, the nasal septum and the sense of hearing in the right ear. He will be committed in a short time.

In considering the treatment of chronic alcoholism, it will be readily understood that the condition of the habitual tippler is such that only palliative measures can be used. Those insane from chronic encephalo-meningitis with adhesions of the membranes are naturally beyond treatment. Gastro-intestinal catarrh of twenty years' standing is likewise beyond relief, and under the same heading may be classed cirrhosis of the liver, arteriosclerosis and chronic parenchymatous nephritis. However, all tipplers are not affected the same, as the two following cases will show: Dr. E. M. McCarthy and myself, this summer, did a post mortem on a man 42 years old who had for twenty years consumed from one to three quarts of alcohol a week. The mucous membrane of the œsophagus, stomach and small intestine was very much thickened and of a dark gray color. The pylorus was almost obliterated. Liver, pancreas and kidneys were normal. This man starved to death on account of this gastro-enteritis. In contrast, the second case was a man who died a few weeks ago at the age of 86, the immediate cause of death being chronic prostatic hypertrophy. He too had consumed from one to three quarts of liquor each week for 40 years, and up to the time of his death had a remarkably strong heart, perfect digestive functions and gave no evidence of organic disease.

Dipsomania is a form of alcoholism seen in persons with a strong hereditary tendency to drink. The victims go periodically "on a spree,"

but in the intervals they are entirely free from any craving for alcohol. These patients are most interesting from a neurologic standpoint. Dipso-mania is still regarded by some as a mere habit; as twirling the thumbs, or eating pie for breakfast may become habits. They say the man is a fool to get drunk and that the whole solution of the drink problem is for the drinker to stop drinking. The facts of the case are that the average dipso-maniac is neither a fool nor a degenerate and is not a drunkard through choice. He is often a man of high character, intelligence and ambition. Intoxication is as loathsome to him as it is to the total abstainer. He is as great a problem to himself as he is to others. He will promise with all good intentions that he will abstain from drink, yet within a few hours of his resolve he is drunk. When he recovers he is mortified and mystified, and if an explanation is demanded, he is ashamed to admit that he acted without motive. He will therefore try to find some excuse for his conduct. It was a hot day or it was a cold day. Or he met a friend or he failed to meet a friend, or he had good fortune or ill fortune. But of course these excuses fail to satisfy either his friends or himself and make him appear more irrational than if he had said nothing. Now the fact of the matter is that this man had good and sufficient reason for getting drunk. He is mentally diseased. He may be vigorous and healthy otherwise, but in this one respect he is an invalid. The normal healthy man does not crave alcohol, and if the demand for it is so great as to force the victim to use it in spite of his desire to abstain, there can be no doubt that a pathological condition exists.

These cases are best treated in a sanitarium, where the physician can have absolute control of the patient. The treatment naturally consists of two distinct steps: first, the acute symptoms, insomnia, delirium, anor-exia and nausea, must be corrected; second, the central nervous system must be put in condition to resist further relapses. Patients usually arrive at an institution grossly intoxicated, with part of a flask of liquor left for one last sweet drink. Personally, I always allow this last sweet drink and then absolutely forbid more. The tapering off process is wrong and a loss of time. Sleep must first be obtained artificially with various hypnotics. In 1899, Dr. Charles J. Douglass, of Dorchester, Mass., first called attention to the use of apomorphine in $1/30$ grain doses as a sedative for the deliri-um of alcoholism. I have used it for some five years in these cases with excellent results. Given hypodermatically its sedative action is seen usually in about ten minutes. No matter how wild or noisy the patient, he very quickly falls into a calm sleep, which may last six or eight hours. Rarely the dose may have to be repeated in one hour. Rosenwasser, in the Med-ical Record of July, 1907, advises $1/10$ grain of apomorphine, to which is added $1/30$ grain of strychnine. This gives the emetic action within ten

minutes, followed by two to eight hours sleep, from which the patient awakes refreshed, sober and rational. Later, other sedatives may be used, trianol, verinal and medinal working well in different cases. Medinal in my experience is the best hypnotic for general use, 5 to 15 grains dissolved in a full glass of water at bed time usually giving a most normal night's rest with no depressing effects the next day. As soon as possible thorough elimination from the bowels should be obtained by two to four compound cathartic pills, followed in two hours with a brisk saline. Then should follow for a few days a bitter tonic of nux vomica and capsicum to stimulate the digestive organs. Bromides may have to be used during the day for the first week.

The diet during this period should consist of liberal servings of eggs, beef and milk, with black coffee three times daily. After the first two days the patient should be kept in the open air and the mind pleasantly occupied. An attendant is necessary for the first two weeks. This covers the first period of treatment. The second and most important period requires most careful treatment for from two to six months. The condition is now typically a neurosis with depleted nerve force and weakened will power, and all those measures necessary to re-establish nerve stability must be applied.

Psychotherapy, suitable occupation, both mental and physical, an out-of-door life, massage, association with carefully selected people, a plain but substantial diet, with proper nerve tonics, are the means to an absolute cure with no relapses, and this can be expected in about 50 per cent. of the cases treated.

Dr. V. A. Ellsworth, Superintendent of the Washingtonian Home for Inebriates in Boston, has this to say about treatment: "My opinion is, that the great majority of inebriates do not drink to satisfy thirst or to gratify taste, but for the pleasurable sensation produced by stimulating the nervous system. The craving for drink is the craving for something which accompanies it. When this craving, or 'brain storm' comes on it must, like a storm, have its full play until its fury is spent. It cannot be averted by will power alone. One of our first duties, then, is to endeavor to strengthen the weakened will and to arouse and encourage the patient to the belief that he has the power within himself to keep him secure against his old enemy. Psychical as well as physical agencies are necessary. The general treatment applicable to all patients is directed first towards elimination of toxic poisons by means of baths, purgatives and diuretics. In my treatment I never use opium, chloral or hyosin, as they tend to check elimination, derange the digestion and have a paralyzing effect upon the heart. The best results are obtained by the minimum use of drugs and the maximum use of pure air, pure water, pure food, sunlight, rest and sleep, with such an amount of exercise for the body and mind as each individual case demands."

A BRIEF HISTORY OF MEDICINE.

By M. P. JUDKINS, M. D., OF ROCKLAND.

The practice of medicine and surgery is as old as human needs. Its growth and development have depended partly on intellectual capacity and attainments, and partly on political conditions. It is an old aphorism in business that "trade follows the flag," and it is also true that the political capitol of the conqueror has been the center towards which has flowed not only material wealth but all the accompaniments of an advancing civilization.

Among the latter may be mentioned the founding of educational institutions, schools of philosophy, medicine, law, art and science. In this way the different nations of the world have mingled together,—winnowing out the chaff of ignorance and superstition, and gathering up the wheat of truth and wisdom. And so the growth of medicine has followed the Conquering Host, (as we shall see later), picking up something here of value and discarding something there which has been a hindrance to progress.

Just when and where the practice of medicine had its beginning is not fully known. It is known, however, that the Hindoos, at a very early age, were proficient in surgery,—performed with skill and success such operations as trephining, lithotomy, reducing fractures and dislocations, tapping for dropsies, removing tumors, cataracts, glands, etc. There was also a plastic operation for the restoration of the nose. They had more than one hundred surgical instruments,—made of steel. In medicine, they had ointments and other external applications, and were familiar with the uses of arsenic, zinc, copper, mercury and sulphate of iron. For the treatment of every known form of disease, they had minute directions.

And yet they had no true theory of function as expressed in physiology, nor a true theory of structure as expressed in anatomy. Of pathology,—the court of last resort,—they knew practically nothing. By reason of their isolation they did not influence western nations, and it is not certain but Alexander the Great carried to them, on his tour of invasion, some of the priest-physicians of Egypt who tarried behind to convey to this new people the healing art. Be this as it may, it is certain the Hindoos did not go west to enlighten the people of Europe, and gradually the light of their art died out, and Grecian influence came to the front.

The Greeks were a warlike people and when they were not fighting among themselves they were often engaged in war with other nations. They established colonies in Asia Minor and on many islands of the Ægean Sea,—going westward as far as Marseilles and eastward to the Black Sea, as early as 1000 B. C., carrying with them their language, arts and sciences.

In these early times Greece stood as the representative and exponent of an advanced civilization.

But it was not till 460 B. C., that the practice of medicine in Europe came to be recognized as an art.

The half century from 480 to 430 B. C. has been called "the Age of Pericles," "one of the most illustrious eras in the history of the world." During this period Greece produced some of her greatest orators, statesmen and philosophers. Among the great men of his time and worthy of equal honor, stands Hippocrates, the Father of Medicine. Born on the island of Cos, off the coast of Asia Minor, in 460 B. C., he early became the representative of modern medicine, and his works to-day are referred to with profound respect. The first characteristic of this new system of medicine is the high ideal which its founder displayed. He broke away from the mysticism and superstition of the priest-physicians of his day, and based his system on the high plane of reason and common sense. He studied the symptoms and course of disease with a scientific bias, striving to connect cause with effect. In this respect he has been a model for succeeding ages. To judge Hippocrates by the light of the 20th century is to do an obvious injustice. In his time anatomy and physiology were little understood and probably nothing was known of pathology.

The system or doctrine of medicine as expounded by Hippocrates and expanded by Galen 500 years later was called "*the Humoral*." And right here it may be said that however absurd it may seem to us, for 2,000 years it never ceased to influence medical thought and practice. According to Hippocrates the body contains four humors: blood, phlegm, yellow bile and black bile. A right proportion and mixture meant health,—and improper proportion, disease. Other features of his system were his belief in the healing power of nature, and the great importance of diet.

Notwithstanding his limitations he was a prolific writer on medical and surgical subjects. His treatises on fractures and dislocations, on diet and regimen, compare favorably with the works of modern authors as late as the beginning of the 19th century. The earliest edition of his works in Greek appeared in 1526 A. D. Near the middle of the 4th century B. C., Alexander the Great invaded Egypt and founded the city of Alexandria,—making it his capitol and the seat of learning for many years. Here was established the celebrated School of Medicine,—the first University Medical School in the world's history, where dissection and vivisection were first practiced regularly and publicly for anatomical knowledge. The Greeks did not permit the dissection of the human body.

For three centuries the school at Alexandria was prosperous and progressive, laying the foundation for the intelligent study of pathology. It is worthy of note that even in Alexandria, Grecian influence in medical

affairs was predominant. Between the Hippocratic era and the founding of the school of Alexandria little progress was made in surgery. But later on a new departure was made. The surgeons became bold operators, were distinguished for their intimate knowledge of anatomy, for the nicety and complexity of their dressings and bandagings. Abdominal surgery was practiced, but in a limited way. Lithotomy was performed by specialists; the operation for hernia was the application of the actual cautery to the walls of the canal after the hernia had been reduced. The first record of the amputation of an extremity is found in the literature of this period. Up to this time, amputations were unpopular on account of the attendant hæmorrhage, which they were not able to control. Their ignorance of physiology and anatomy would not permit them to advance beyond a certain limit, and the same ignorance kept their successors in the same state of helplessness. There is great similarity both in the character of the operations performed and in the instruments employed by the Alexandrian school and the ancient Hindoos, which has led to the belief that their knowledge had a common source.

By reason of the fortunes of war, the capitol of the world was transferred to Rome, 133 B. C. Into this city poured the wise and the rich.

The Roman people had never been interested in medical pursuits,—had never originated a system of medicine. Pliny says they got on for 600 years without doctors. While this statement is not strictly true it is known that the first endeavor to build up, in Rome, a system of medicine on scientific lines, is due to the importation of Greek talent which began 218 B. C. From this time on, various schools were founded, but little advancement is to be noted. An exception may be made in favor of the Arabian school that originated the first pharmacopœia and established the first apothecaries' shop.

With the dawn of the Christian era we begin to note the decline in Roman medicine. From the third to the eleventh century—known as the "Dark Ages"—the monasteries were the chief homes of medical learning and the repositories of important manuscripts. About the middle of the eleventh century Arabian medical writers begun to be known, by Latin translations, in the western world. The supremacy of the Arabian schools lasted till the revival of learning in the fifteenth century. This was coincident with the discovery of the art of printing and stimulated by the discovery of America.

This was a time of general awakening among medical writers, and a successful attempt was made to substitute the teachings of Hippocrates and Galen for all other systems, particularly the Arabic, which for many years had been widely accepted.

For practical use to the physician only two changes had been made in

the theory of the circulation of the blood between the beginning of the Christian era and the 16th century. Galen had discovered that the arteries were not air-pipes containing vital air or spirit, but blood; and second, that the nerves were not tendons which attach muscles to bones. In the 16th century the discovery and use of the valves of the veins opened the way to another discovery which occurred in the early part of the 17th century,—the circulation of the blood. The credit of this achievement belongs to William Harvey, who thus revolutionized the whole system of medicine, as taught at that time. The accepted theory before Harvey's day was that the blood was elaborated from the food in the liver, thence carried to the heart and sent by it, through the veins, over the body. The arteries contained no blood.

While Harvey's theory was, in the main, correct, he failed to show how the blood passed from the arteries to the veins. Four years after his death, Malpighi, the great anatomist, saw the capillary circulation through the newly invented microscope and completed the great discovery.

The 17th century is distinguished by the rise of systems and the teaching of dogmas. The high level of scientific investigation had not been reached. Men worked on theories and strove to reconcile them to facts.

During the greater part of the 18th century we find the same eagerness to establish new systems of medicine which characterized the preceding century. It was at this time, from 1755 to 1821, that homeopathy had its birth and early growth,—a system founded on the well-known dogma of "*Similia Similibus*." Hahnemann's claim that medicine gained in potency by dilution is strictly original. While the name persists, Hahnemann has few disciples who will subscribe to all his tenets.

But more important than theories or systems was the discovery of Edward Jenner (1796) of the principle of vaccination in the treatment of small pox. This discovery led to the more thorough investigation of contagious diseases; at the present time the principle of vaccination is being tested to abort typhoid fever.

During the latter part of the 18th and 19th centuries the invention of percussion was supplemented by that of auscultation,—the combination constituting what is now known as "*physical diagnosis*."

The last year of the 18th century Sir Humphrey Davy discovered the anæsthetic properties of nitrous oxide, but no use was made of this discovery for nearly half a century.

The first half of the 19th century shows great progress in the widespread endeavor, particularly in surgery, to gather up the knowledge of the past and by experiment and observation solve the problems of the hour. How to treat open wounds, how to avoid infection, how to construct hos-

pitals, which should be a blessing—not a menace—these and other questions confronted the profession.

Surgery had reached the extreme limit of progress, under existing conditions. It seems a remarkable coincidence that the discovery of ether, as an anæsthetic, should be made on the eve of another great discovery,—aseptic surgery.

Ether was first brought to the notice of the profession in the 13th century, but no practical use was made of it till 1846. Two years later chloroform was discovered and became for a time the popular anæsthetic, especially among English physicians.

In 1862, Louis Pasteur made the great discovery with which you are all familiar,—the microparasitic origin of disease; but a quarter of a century elapsed before the full value of his achievement was realized. While Pasteur was the man of the hour, great credit must be given to Lister and Koch for the great contributions they have made to the healing art. Nor must we forget those other men whose discoveries along other lines have made the world their debtors. I refer to those who discovered the agency of insects as carriers of disease, one of whom paid the penalty of his zeal with his life.

No record of the 19th century would be complete without reference to the discovery of antitoxin in diphtheria, and the sera for the prevention of cerebro-spinal meningitis and the bubonic plague. How valuable 606 may become the future will determine. Little mention has been made of the use of drugs, and nothing of bloodletting, which for many years was the sheet anchor of the profession. Grave and long discussions were indulged in to determine whether the blood should be taken from a vein nearest the inflamed part or quite remote. Drugs have always been used, and up to very recent times with great freedom. Their use has been largely empirical, with little change to-day. We are, however, drifting rapidly towards prophylaxis rather than direct cure. The future of medical science is in the hands of a vast army of medical experts, whose untiring labors are certain to make good the prediction of Pasteur: "It is in the power of man to cause all parasitic diseases to disappear from the world."

Case Report.

PREGNANCY COMPLICATED BY ECLAMPSIA AND FIBROID OF THE UTERUS.

By F. H. JACKSON, M. D., OF HOULTON.

All observers of experience will readily admit that the complication of pregnancy by eclampsia is sufficient to cause the utmost apprehension on the part of the attending physician, but when we have added to this grave condition, the birth of the child seriously endangered or actually prevented by the mechanical presence of a fibroid, the condition becomes at once most serious. The case we report brings again to attention the important fact, which is seemingly not recognized by a very large part of the profession; the pregnant woman should be under the care of the physician from the beginning of pregnancy. Were such a course pursued, many lives now lost would be saved, for the physician who is carefully watching the progress of pregnancy would anticipate, in many instances, the approach of trouble, and institute measures for obtaining relief. Fortunately the practice is growing among a certain class of men to insist upon looking after their pregnant women from the start, but there is, and always will be, a large number who will regard such a procedure as the utmost folly.

If in our case the patient had informed her family physician of her condition, I know him well enough to know that he would not have been ignorant of her pelvic condition. The patient not only concealed the fact that she was pregnant, but persisted in her daily work and food, in face of warnings that would have been interpreted correctly by him.

It goes without saying that the mere existence of a fibroid in a pregnant uterus does not warrant operative interference on this ground alone. The attendant should, however, know of the existence of the mass before the advent of labor and should feel fairly well assured that delivery per vias naturales is possible before waiting until the patient is exhausted by fruitless efforts to drive the child past a mass causing relative or absolute dystocia before interfering. If before the onset of labor we feel that the birth of the child by natural forces will be hazardous or impossible, it is plainly evident the course to pursue. Such possibilities depend largely upon the mobility and situation of the fibroid, and the presence of a tumor in the neighborhood of the cervix gives a greater probability of operative interference being required.

The case was seen in consultation with Dr. P. L. B. Ebbett, of Hodgdon, on May 14, 1909, and is reported on account of its rarity and the important lesson that it teaches.

Mrs. M., married, 39; dressmaker; primipara. Father and mother alive and well. One older sister died from eclampsia with the birth of her first child. In April, 1909, a brother died of acute hepatic trouble presenting the clinical features of Weil's disease. The patient has had no serious illness and was six months pregnant. For the past week she had suffered from the most intense headaches and at night her feet and ankles would be so swollen that she could not wear her shoes. Her bowels had not moved for four days, but she had a most ravenous appetite and ate heartily of very heavy foods. On the 14th of May, about 10 in the morning, she fell on the floor in an eclamptic seizure. She was seen by Dr. Ebbett in about half an hour and he found the following: Patient in convulsions, face intensely cyanotic, pulse 160, feeling like a hard cord, a lacerated tongue filling her mouth and breath of intensely foul odor. Morphine was given and a small amount of chloroform. When I saw the patient a little later she had partially recovered consciousness, but her condition was very grave. We gave the patient an enema which resulted in the passage of a large amount of putty-colored material of the most intense odor. The bladder was catheterized and about half ounce of very dark urine obtained. Later examination of this showed it filled with red cells, leucocytes and large numbers of large and small granular casts and it boiled solid c acetic acid and salt solution. Examination of the abdomen was very difficult and unsatisfactory on account of the rigidity of the abdominal muscles but the fœtus could be made out in an L. S. A. position, but no movements or heart sounds could be detected. Occupying the lower anterior uterine segment was a mass about the size of a fœtal head. The mass was hard, immovable and was causing a posterior displacement of the uterus. The cervix was hard, very much elongated and pointed upward. The pelvic measurements were not taken, but the vagina was small and the canal long.

Although it was realized that delivery from below would result in damage to the extremely hard soft parts, I made an attempt to dilate the cervix, but with no success. The tissue was so hard that the slightest pressure would result in tearing. Vaginal Cesarean was not deemed advisable, on account of the conditions present, so I did abdominal section. The anæsthetic employed was anesthol, and was given by Dr. P. E. Gilbert. On opening the abdomen in the usual manner the fibroid was found tightly wedged into the pelvis and completely blocking the outlet. It sprang from the lower anterior uterine segment at the level of the internal os and had a broad sessile attachment, and was nourished by two large sets of vessels which sprang from each side of the uterus. The mass was removed by clamping and the uterus then opened. A dead baby was easily delivered and placenta came away without any trouble. The uterus was sutured in the usual manner, and the pedicle of the fibroid severed with peritoneum.

The post operative history presents the following points of interest. Partial consciousness was not regained until 2 A. M. the next morning. The amount of urine for the first 24 hours was just one ounce. This in spite of salt solution given by rectum and subcutaneously. The urine boiled solid and differed in no way from the first specimen. The enemata of glycerine, turpentine and magnesium sulphate resulted in large, foul smelling movements. The 17th, the area of liver dullness was distinctly less, the skin had a distinct yellow look, the conjunctivæ jaundiced, and the pulse of miserable quality, being intermittent and irregular. The abdomen was flat and no signs of peritonitis. The temperature never went above 100. The 18th found the patient a little better in some respects, but the jaundice was increasing and the heart's action far from satisfactory. Death took place about 11:30 P. M. the night of the 18th, the cardiac action becoming weaker and weaker.

Editorial Comment.

The 59th Annual Session.

The Annual Meeting of the Association on June 28-29, held at Augusta, was one of the largest in its history, 201 members being registered, and the business, literary, and social features were carried out very satisfactorily, the members of the Kennebec County Medical Society proving to be excellent hosts. A full account of the proceedings of the House of Delegates, Council and papers presented, with discussions, will be published in the Journal from time to time.

The principal measures of a business nature that were considered were as follows:

It seemed the unanimous opinion of the House of Delegates that the Journal had made a very creditable start, and that the change from a yearly volume of Transactions to a monthly paper, combining the State Association Transactions, with live up to date news, had been of great benefit.

It was accordingly voted to continue the Journal, and to provide suitable quarters for establishing a Medical Reference Library around the nucleus of books obtained from the Maine Academy of Medicine and Science.

An amendment to the by-laws, which provides that "Any active member whose dues are in arrears more than one year shall forfeit his membership and may be re-instated only by becoming an active member of some component county society, etc.," was passed. The object of this amendment,

which has been under discussion in one form or another for several years, is to place all active members on an equal footing, and to keep the list of members absolutely up to date. At the present time the membership is considerably over 600—the largest in the history of the Association.

Somerset County Medical Society was granted a charter with 23 members, so that the county organization plan is practically complete, comprising every county except Lincoln, which is so situated geographically that for some time a local society will be impossible to maintain.

The next annual meeting will be held in Portland, in June, 1912, the exact date being left with the incoming officers, who were elected as follows:

President, Stanley P. Warren, of Portland.

First Vice President, Wm. C. Peters, of Bangor.

Second Vice President, L. G. Bunker, of Waterville.

Secretary, W. Bean Moulton, of Portland.

Treasurer, E. W. Gehring, of Portland.

The various committees appointed at the last meeting made a most excellent showing in sending in reports, and the general impression of the session seemed to be that the Association was never in a more efficient, active, and healthy condition than it is at the present time.

The Journal.

One year ago at the Annual Meeting of the Maine Medical Association held at Bar Harbor, the question of establishing a State Medical Journal received consideration at a meeting of the House of Delegates, but scepticism in regard to the success of the venture from either a financial or a literary view point prevented any definite action by that body. Notwithstanding this the friends of the project took up the matter before the General Session, the movement at this time taking on a peculiar interest from the fact of the announcement made by Dr. E. E. Holt, of Portland, that the Trustees of The Maine Academy of Medicine and Science, an organization that had accumulated during years of activity a library of considerable size, and having ceased to exist as an active society, were willing to give to the Maine Medical Association the entire library, together with the funds remaining in the treasury, on condition that this Association establish a publication that by its exchanges with other medical journals and publishing houses might keep such a library up to date and of some value. For many years it had been the custom of the state society to publish its "Transactions," always in one volume, usually nearly a year after the Annual Meeting. This was sent without extra charge, the cost of publication

being taken from the funds of the society, which necessitated a considerable yearly outlay. After considerable debate it was finally decided to appoint a committee to consider the matter, and in the event that they deemed it wise, to establish such a publication, providing the amount expended should not exceed the sum usually appropriated for printing "The Transactions." This committee consisted of the President, Dr. Bennett, Dr. A. D. Sawyer, Dr. John Bowers and Dr. F. Y. Gilbert.

This committee met in August, and after due consideration decided to appoint an editorial staff and start the publication. Seven issues resulted from this move and all papers read at the state meeting have been printed, together with a certain amount of county news and some papers read before other societies in the state. An advertising medium for ethical, surgical, pharmaceutical and commercial houses has been established, the receipts from which have helped to defray the cost of publication. The Journal has thus fulfilled both of its obligations to the state society, in publishing all the articles read at the annual meeting that have heretofore appeared in the Transactions and in keeping within its appropriation, and no additional cost to members has been incurred.

The Work of the Journal.

With this issue the Journal begins on its second year, although but seven numbers have actually been printed. It is hoped by the Editors and friends of the publication that during the year to come many improvements can be made and that the paper may become a useful medium for disseminating matters of medical interest and become an efficient auxiliary to State and County Societies. Some of the things that a state journal can do may be briefly outlined as follows:

It will take the place of the old Transactions, embodying the useful features of that publication and bringing out the papers and business at a much earlier date.

It will furnish a medium whereby the many excellent papers read before our County Societies, may be given a wider publicity than is now possible, as it is a well known fact that some of the best papers read in the state are presented at these meetings, frequently by men of national and international reputation as physicians, surgeons and laboratory workers.

Numerous smaller medical societies and clubs exist throughout the state, and it is the intention of the Editors to report these meetings and such papers as may seem of particular interest.

It will enable the physician who misses attendance upon some meeting, owing to distance or the many unavoidable occurrences incident to a busy practice, to keep in touch with the proceedings in which he is interested.

As a medium for reporting cases of more than usual interest, such as may occur in the practice of any physician, its pages will always be open.

It will endeavor to conduct a department of Reviews of Current Literature, so that abstracts of articles appearing in the large journals may be available.

It will print items of a social nature and appreciations of the life work of men we have known and respected.

It will show a healthy interest in public affairs of a medical nature, such as the work done by our State Board of Health, state and local laboratories, our hospitals for the insane and feeble-minded, general hospitals, our public school system, our pure food and drug act, State Examining Boards, Marine Hospital and quarantine service, Military posts and State Militia, and to publish salient facts relative to legislation, giving due notice of dangerous and vicious pieces of legislation as well as to commend salutary laws for the improvement of the medical profession and the safe guarding of the public interests.

Last but not least, it will mean the establishment of a medical library to be owned by the State Association and open to all the members at any and all times, which shall be under the care of an efficient librarian, the books properly indexed, with arrangements for the taking out of books, so that physicians in all sections of the state may profit directly by its existence, and the students of medicine may find at their disposal the works of all the masters of medicine since time began, the most valuable asset of the profession and the one that separates it forever from quackery and superstition.

With this end in view, friendly criticism and helpful suggestions will be most welcome, and adverse criticisms may, we trust, goad us into more productive efforts. Believing that it is possible to conduct the Maine Medical Journal so that it will compare favorably with similar publications of other state societies, we solicit your co-operation.

Maine Medical Library.

At the Augusta meeting, provision was made for a State Medical Library. As stated before, the Library of the Maine Academy of Medicine and Science has been given as a nucleus for a State Library, also the

Academy funds in the treasury at the time of disbanding could be used in establishing a Journal and Library.

The Maine Eye and Ear Infirmary generously offers the use of their present library rooms on condition that they can use our librarian and stenographer occasionally. Beginning Saturday, July 15, 1911, the Journal engaged Miss Eileen Moore as stenographer and librarian. Work was immediately begun on the library. The books have been classified and arranged in sections and the work of indexing and cross-indexing begun. By another month, we hope to be able to say that any physician going to the library for any specific work can readily locate it, either by himself or through the librarian.

Medical School of Maine.

We regret the retirement of Dr. Mitchell as Dean of the Medical School, but can assure him that all of his good works will be continued by his very able successor. Already, many advantageous changes are being made, while others have been suggested. Every effort is being made to bring our school to the highest point of efficiency and well merits the commendation and co-operation of the profession of the state. A more complete statement of the changes will appear in our next issue.

July Issue.

Owing to the late date set for the June meeting, it was impossible to get out a July issue. The 1910 meeting voted to try the Journal for one year ending June 1, 1911. As the meetings were usually held during the second week of the month there would be ample time to get out a July number after definite action was taken, but the vote to continue the Journal was taken June 29th, so that we had to omit the July number of 1911, and go on with the August number. This closes the twelve numbers July first each year. Hereafter the Journal will be sent out the first of each month, and any member not receiving a copy should notify the Editor, so that any mistake can be rectified.

AMERICAN BUREAU OF INFORMATION

OF THE INTERNATIONAL COMMITTEE FOR POST-GRADUATE MEDICAL EDUCATION, 303 EAST TWENTIETH STREET, NEW YORK CITY.

The Delegates of the United States to the International Committee for Post-Graduate Medical Education will maintain a Bureau of Information on Medical Education, particularly Post-Graduate Medical Education. All available information on this subject will be kept on file for the benefit of those who inquire personally or by mail about the educational facilities in the different medical centers of the world. This Bureau of Information will be located at 303 East 20th Street, New York City, and will bear the name of: American Bureau of Information of the International Committee for Post-Graduate Medical Education.

All communications should be addressed to "Medical Information Bureau, 303 East 20th Street, New York City." Communications requiring answer must be accompanied by stamped envelope.

INTERNATIONAL COMMITTEE FOR POST-GRADUATE MEDICAL EDUCATION.

President—Geh. Med. Rat Prof. Dr. Waldeyer, Berlin; *Secretary-General*—Prof. Dr. R. Kutner, Berlin.

Delegates of the United States—Dr. G. N. Miller, New York City; Dr. Ed. Quintard, New York City; Dr. W. S. Thayer, Baltimore, Maryland; Brigadier-General, G. H. Torney, Surgeon-General of the United States Army, Washington; Dr. C. F. Stokes, Surgeon-General of the United States Navy, Washington; Secretary for the United States of America, Dr. L. Kast, New York City.

Current Medical Literature.

(Boston Medical and Surgical Journal.)

A Symposium by members of the staff of the Boston Floating Hospital, contains 11 papers, each from the viewpoint of its writer's special interest, and all tending toward emphasis of the advance made in the treatment of Infantile summer diarrhœa by the use of lactose and dextrose, a method instituted at this hospital in the summer of 1910, for the first time.

Laboratory experiments having shown that bacterial toxins in the intestinal tract are formed by the breakdown of proteins, and that the presence of sugar in the tract has a protein-sparing action, brings the conclusion that the presence of sugar in the intestinal tract prevents further for-

mation of toxins. Again, experimentation shows that bacteria in a protein medium form putrefactive products; in a carbo-hydrate medium, fermentative, and that bacteria will act upon the carbo-hydrates rather than the protein, if both be present, from which the same conclusion is drawn. The feeding of carbo-hydrate to a patient serves two purposes, gives food in a readily assimilable form, and prevents the further formation of toxic bodies.

The routine method of treatment, and one which seems advisable over their older methods, comprises:

1. Complete cleansing of intestinal tract, as by castor oil.
2. Withholding everything except sterile water from mouth for from 12 to 15 hours.
3. The feeding of a 5 per cent. solution of lactose in sterile water, frequently, in small amounts for several days.
4. A cautious change to introduction of nitrogenous foods.
5. The employment of a 2.5 per cent. dextrose infusion in salt solution at the start.

Objections to this treatment, such as glycosuria, intolerance and ulcerations, have been found to be negligible.

The use of dextrose in irrigations has not been found to have any result; and as to silver nitrate irrigations Dr. Bowditch thinks the use doubtful, Dr. Smith that they are productive of no harm, and clear up the blood and pus in the movements.

Stimulation is used most frequently in the form of strychnia, and infusion of salt solution.

In the study of organisms found in the movements, the gas bacillus was found predominant in 5 per cent. of the cases examined, and was in this number thought to be the cause of the disease, yet a differential diagnosis cannot be made from the symptoms. In these cases a carbo-hydrate feeding would be harmful, and the approved treatment would be by butter-milk.

H. J. E.

(American Journal Medical Sciences.)

THE MEDICINAL TREATMENT OF DIABETES MELLITUS.

By F. FORCHHEIMER.

The author asserts that whatever progress has been made in the treatment of diabetes mellitus is due to a scientific appreciation of dietetics. Diet not infrequently prevents complications and gives the best results in the greatest number of cases. Such treatment is rarely causal, that is, it is not directed against an arterio-sclerosis, cirrhosis of the liver, myocardial insufficiency, gastro-intestinal disease, disease of the nervous system, or

syphilis, and it often fails for two reasons: (a) it is of little or no value, (b) it is impossible to have patients carry it out. Accordingly, medicines to the number of forty-two had been tried up to 1894. With the exception of two—arsenic and hexamethylenamine—drugs, unlike diet, do not increase carbo-hydrate tolerance. Their efficacy is enhanced by diet. If diet regulation is impossible, hexamethylenamine and belladonna are valuable, the former if pyelitis also exists, the latter in mild cases of diabetes. Concerning the value of mineral waters—Carlsbad and Vichy—there exists difference of opinion; by some they are thought to be beneficial; others consider their effects negative.

The writer regards coma as an acidosis, but feels that it is much more than a question of acidity and alkalinity of the blood, inasmuch as alkaline treatment is usually ineffective. For practical purposes, fats and albumins produce acetone bodies. Therefore, when coma is impending, carbohydrates ought to be substituted for them. In this condition, milk as an exclusive diet is the best that can be done dietetically. He concludes with the caution "in treating diabetics for sugar tolerance great care must be taken not to produce coma."

E. W. G.

(American Journal Medical Sciences.)

CHRONIC INFLUENZA AND ITS RELATION TO NEURO-PATHY. BY GLENN I. JONES.

By a series of cases the author submits evidence that influenza is a chronic as well as an acute affection. He states that infection with the influenza bacillus is frequently followed by organic and inorganic nerve disease; and suggests a possible relationship between such infection and the psychoses.

E. W. G.

(American Journal Medical Sciences.)

THE DIETETIC TREATMENT OF DIABETES MELLITUS.

BY NELLIS B. FOSTER.

An excellent paper based upon the fact that the dietetic treatment of diabetes demands the same degree of painstaking attention to detail that is required in modern scientific infant feeding. Five concrete cases, illustrating different types of the disease, are cited, with the diets employed and daily analyses of urine appended. The paper includes an account of the oatmeal diet and many receipts contributed by the families of patients to enlarge the dietary of the diabetic.

E. W. G.

(Annals of Surgery.)

INFLAMMATORY TUMORS OF THE ABDOMEN SIMULATING
MALIGNANT DISEASE.

The author calls attention to the great difficulty oftentimes of distinguishing between inflammatory masses and malignant disease in the abdominal cavity, reporting some half dozen cases at some length. He says a laparotomy should be performed in any case though the prognosis may seem hopeless. (A small piece should be removed for immediate microscopic examination.) This will remove all doubt, and, in some cases, the tumor may prove operable. In other cases a palliative operation may relieve urgent symptoms or where the mass is inflammatory may unexpectedly result in cure.

P. W. D.

Book Reviews.

Progressive Medicine. A quarterly digest of advances, improvements and discoveries in the medical and surgical sciences. Edited by HOBART AMORY HARE, M. D., Lea & Febiger, Philadelphia.

The June number of *Progressive Medicine* contains its usual extended résumé of current medical and surgical literature. William B. Coley reviews the latest articles on the various problems in hernia repair, and discusses the question of using unabsorbable suture material, advocating from his own large experience the use of absorbable sutures. Under "Surgery of the Abdomen," A. G. Gerster considers at some length the use of Röntgen Rays in the diagnosis of abdominal conditions. By means of the "Bismuth Meal" of Reider, most accurate radiographs of the stomach and intestines can be obtained. He quotes Hertz and Jordan, who found that the auscultatory percussion area and the shallow of the stomach containing the bismuth meal did not correspond in any particular with regard to the present status of the Cammidge reaction for pancreatitis. The general consensus of opinion is adverse. Considerable space is devoted to the discussion of recent views regarding Banti's Disease. This complex is probably the result of an infectious thrombophlebitis of the portal vein and its radicals. The only cure is splenectomy. Much material relating to cancer, its etiology, the question of heredity, experimental inoculation, and serum treatment is presented under the heading of Gynecology, by John G. Clark. With regard to desiosis of the blood, Stengel finds that little advance has been made in the knowledge of pernicious anæmia and chloro-

sis. In leukemia, X-ray treatment offers the only means of relief, but must be applied with great care. In the hemorrhagic diseases, the use of human and animal serum with Calcum salts, gelatin, and Witte's peptone solution (5 per cent.) are advocated as the best methods of treatment. Nothing particularly new has been advocated in regard to diabetes mellitus, and in exophthalmic goiter, an emphasis is laid on the recognition of early signs and symptoms of the disease, and the diagnosis of incomplete forms.

T. J. BURRAGE.

A Treatise on Diseases of the Nose, Throat and Ear. By WILLIAM LINCOLN BALLENGER, M. D., Professor of Laryngology, Rhinology and Otology in the College of Physicians and Surgeons, Chicago. New (3d) edition, thoroughly revised. Octavo, 983 pages, with 506 engravings, mostly original, and 22 plates. Cloth, 5.50, *net*. Lee & Febiger, Philadelphia and New York, 1911.

Those of us who are familiar with the work of Dr. W. L. Ballenger most gladly welcome his third and revised edition of "Diseases of the Nose, Throat and Ear," published by Lea & Febiger. He has given us a concise treatise on clinical anatomy of the nose and accessory Sinuses with some exceptionally good plates showing the Sinuses and their innervation as well as the interior of the nose.

He has devoted some little space to office equipment and the action of various drugs. His work on septal deformity gives us a review of all the work done along these lines, together with description and plates, showing the various operations. Few instruments are in more constant use than the Ballenger swivel knife, as also other instruments placed in the hands of the profession by him.

In part I, he has given us a most complete review of the work of recent years on nose and the accessory Sinuses.

Part II is devoted wholly to the Pharynx and Fauces, covering Adenoids, the lingual tonsil, the various inflammatory forms of the Pharynx and adjacent structures, together with abscess formation: Functional Neuroses, Tumors, etc.. His work on tonsils gives us the most recent views and is most commendable for the general practitioner. From the question of the Anatomy to the complete removal must convince one of the uselessness of any procedure which contemplates only a partial removal of this gland.

Part III is devoted to Diseases of the Larynx and considers the question of Diphtheria; Tracheotomy; Intubation, with some very good illustrations, also the question of Tracheotomy and Esophagoscopy.

Not only are these subjects completely gone over but the illustrations are of greatest value.

Part IV gives us all that is new, together with all that was of value in the old methods in the consideration of the diseases of the ear and mastoid. The clinical anatomy and physiology of the ear and mastoid gives us a most comprehensive review of the work done in the field, whereas the operative work is remarkably well illustrated.

This book is of great value to the general practitioner as well as the specialist, and we can recommend it to all alike.

F. Y. G.

County News.

AROOSTOOK.

The regular annual meeting of The Aroostook County Medical Society was held on June 7th, at Crescent Park, Houlton, Maine.

Meeting was called to order by President C. F. Thomas, and there were present, as guests of the Society, Dr. E. H. Bennet of Lubec, and Dr. E. W. Gehring of Portland.

The day and location were ideal, and the attendance large and enthusiastic. Drs. Frank Kilburn and T. S. Dickison were elected delegates to the Maine Medical Society. Dr. Charles H. Harmon of New Sweden was elected to membership.

Officers elected for ensuing year :

President,	F. W. Mann, Houlton, Me.
Vice President,	E. H. Doble, Presque Isle, Me.
Secretary,	W. G. Chamberlain, Fort Fairfield, Me.
Treasurer,	W. E. Sincock, Caribou, Me.

The following was the program for the day :

The Administration of General Anesthesia, with Special Reference to the Open Method, Dr. W. G. Chamberlain, Fort Fairfield.

The Medical Profession in Maine, Dr. E. H. Bennet, Lubec.

Urinary Calculi in a Child of Three Months. Report of Case. Dr. P. L. B. Ebbett, Hodgdon.

Concerning the Importance of Details in the Practice of Medicine, Dr. E. W. Gehring, Portland.

President's Address, Dr. C. F. Thomas, Caribou.

Next meeting to be held at Presque Isle, the 3d Tuesday in January,

1912.

Fort Fairfield, July 19, 1911.

W. G. CHAMBERLAIN, *Secretary.*

CUMBERLAND.

CUMBERLAND COUNTY MEDICAL SOCIETY.

The regular quarterly meeting of the Cumberland County Medical Society was held at the Congress Square Hotel, Friday evening, June 9th, at eight o'clock.

The meeting was called to order by Dr. Addison S. Thayer, President, and the following delegates to the State Association were elected, namely: Drs. Abbott, Bowers, Cousins, Alfred Mitchell, Jr., of Portland, and Dr. Sylvester of Harrison. Dr. Bussell and Dr. Thompson of Standish were elected to membership.

The following amendment was adopted: "Amend the first sentence of Section 2, Chapter II, of the By-Laws, which now reads: 'A meeting shall be held at 8.00 P. M., on the second Friday of March, June, September, and December,' so that said sentence shall read as follows: "A meeting shall be held at 8.00 P. M., on the second Friday of February, April, October and December."

"Amend the second sentence of Section 1, Chapter III, of the By-Laws, which now reads: 'Nominations shall be made by informal ballot, and all elections shall be by ballot,' so that said sentence shall read as follows: "All elections shall be by ballot."

Following the business meeting, Dr. James G. Mugford of Boston read a paper on "Some Problems on Abdominal Ptosis."

Owing to some misunderstanding, it was impossible to have an illustrated talk, but with black-board illustrations the paper proved to be most interesting and instructive. It is hoped that in the near future the Journal will have an opportunity to publish the paper in full.

A Dutch Lunch followed the general meeting. The Association is looking forward with a good deal of pleasure to the coming of Doctor Mayo of Rochester, Minnesota, who is expected some time in the fall. A due notice will be given of this meeting.

PHILIP P. THOMPSON, *Secretary*.

PORTLAND MEDICAL CLUB.

The May meeting of the Portland Medical Club was held at the Columbia, May 4th; twenty members were present. Dr. W. C. Whitmore of Stevens Avenue was elected to membership.

The Committee for the Annual Outing was appointed, consisting of Dr. R. B. Moore, Dr. Carmichael, and Dr. E. E. Holt, Jr.

Dr. Stanley P. Warren reported a case of Cæsarian Section, necessary on account of double lateral scoliosis, primipara, four and one-half feet

tall, twenty-eight years old, with a true conjugate of two and one-fourth. Pictures of mother were shown.

The essay of the evening was by Dr. Chauncey R. Burr. "Lesions of the Pneumogastric Nerve." After painstaking summary of its anatomical distribution and survey of symptoms following division of the nerve or lesion on its course, the intimate relationship between it and the sympathetic nervous system was emphasized. Illustrations were cited of cases where a peripheral bogus irritation was reflex cause of such diseases as asthma, tackycardia and high blood pressures. A general splanchnoptosis with its resultant formation of a deformed chest, together with improper innervation of lung tissue, all caused by pneumogastric neuritis, form the "pretubercular" state. Affections of the vagus are divided into 1. Specific intoxication. 2. Acute infectious diseases. 3. Definite lesions cerebro-spinal system.

Local findings at necropsy confirm the theory of pneumogastric lesions in these conditions. As to treatment for acute condition absolute rest in bed, hot local applications, light diet and drugs. Atropine is supposed to have specific effect on the vagus, and may be used in conjunction c. tr. iodine. "Crotalin" or rattle snakevenom is also used, 1/100 to 1/200 gr. Hypo weekly in chronic cases. For chronic neuritis massage and iodides in some form, counter-irritation and electricity. Mays injects 4/7 m. 2 1/2 per cent. silver nitrate over sheath of nerve, a painful procedure and so preceded by 5 m. of 2 1/2 per cent. cocaine solution. In gastropogis splanchnoptosis, abdominal, sometimes giving great expansion to the chest.

In the discussion which followed, the members all congratulated themselves on hearing such an able and instructive paper. Adjourned 9.25 P. M.

H. J. EVERETT, *Secretary*.

WESTBROOK MEDICAL CLUB.

The Westbrook Medical Club observed its 5th Annual Ladies' Day, May 1st, 1911.

It being the last meeting of the season, covers were laid in the prettily decorated dining room of the Westbrook Inn, for the members, their ladies and invited guests. Pratt's orchestra furnished music before and during the banquet. After the banquet, we were conducted to the reception room, where our poetical friend, Dr. Hayes, treated us to several of his poetical sketches, which were hugely entertaining as well as instructive. At a late hour, the meeting was adjourned for the summer recess.

F. L. FERREN, *Secretary*.

MAINE EYE AND EAR INFIRMARY ASSOCIATION.

The annual meeting was held in City Hall, Augusta, June 28th, 1911. Dr. O. S. Vickery, Dr. E. E. Holt, Jr., and Dr. F. W. Mitchell were elected to membership. The following officers were elected for the ensuing year :

President, Dr. E. E. Holt.

Vice President, Dr. W. E. Pennell.

Secretary-Treasurer, Dr. A. H. Little.

A. H. LITTLE, *Secretary*.

KNOX.

The last meeting of the Knox County Medical Society was held June 13th, at the Thorndike Hotel, Rockland, Me. An interesting and valuable paper on "The use and abuse of proprietary medicine" was read by Dr. J. E. Walker of Thomaston. This was followed by a general discussion, after which the members set down to a fine dinner prepared by the hotel management. At our next meeting we are to have the pleasure of listening to a paper by Dr. John B. Deaver of Philadelphia.

A. W. Foss, *Secretary*.

OXFORD.

A field day was enjoyed by Oxford County Medical Society at Poplar Tavern, on the afternoon and evening of June 20th. This was postponed from June 12th, on account of the rain, and the attendance was smaller than usual. Fifteen members with their wives were present and several invited guests, Drs. Gilbert of Portland, Webber and Bolster of Lewiston, being numbered among the latter. Besides the athletic events in the afternoon an automobile trip to Screw-Auger Falls was greatly enjoyed.

A business meeting was called to order by President Farris at 1.30, and the regular business of the Society was transacted.

Dr. A. G. Phipps of Gorham, N. H., who is a member of the Society, reported an interesting case of Poleomyetitis, which he sent to the Massachusetts General Hospital about six months ago. This case was a child two years old who had passed through the acute stage without unusual symptoms and was being successfully treated for the paralysis when a tonsillitis appeared and the tonsils were removed. An emulsion was made of the removed tonsils and injected into a monkey and a typical case of

Poleomyelitis was produced, showing that in this case at least the infection had remained in the throat of the child for six months.

The application of Dr. H. M. Heald of Buckfield was read and referred to the censors.

Dr. F. Y. Gilbert of Portland addressed the Society on matters relative to the State Medical Journal, and following his suggestion it was voted to instruct the secretary to forward reports of all county meetings to the editor of the Journal.

Dr. Wallace E. Webber of Lewiston expressed his appreciation of being present. A telegram from State President E. H. Bennet, regretting his inability to be present, was read.

Adjourned for dinner.

An informal dance was held in the evening.

D. M. STEWART, *Secretary*.

YORK.

The 65th quarterly meeting of the York County Medical Society was held at the Hastings-Lyman Hotel, York Beach, Me., June 22.

Dr. Charles F. Traynor of Portland and Biddeford, Me., was elected a member, and an application from Dr. L. W. Carpenter of Limerick was referred to the Board of Censors.

An excellent shore dinner was served by Host Sewell to the members and their guests, it being "Ladies' Day," after which the group was photographed.

At the afternoon session Dr. E. H. Siter of Philadelphia gave a most interesting talk on Salvaisan, giving his conclusions from results thus far in over three hundred cases. A rising vote of thanks was extended to Dr. Siter.

It was moved and voted that the expenses of this meeting be paid by the Society.

Among members present were Drs. Siter, Small, F. H. Smith, W. W. Smith, Ross, Powell, Cochrane, Willis, Willard, Cook, O'Connor, Emery, Taylor, Carty, Farrell, Dolloff.

Many thanks are due Dr. E. C. Cook of York Village for making arrangements for this meeting.

D. E. DOLLOFF, *Secretary*.

PERSONAL NEWS AND NOTES.

Dr. C. F. Kendall is attending the tour of duty of the 7th Co., C. A. C., in Portland Harbor.

Dr. L. W. Carpenter has removed from Goodwin's Mills to Limerick, Maine.

Dr. and Mrs. G. A. Pudor are abroad for the summer months.

Dr. Vickery of Belfast has recently announced to the profession that he limits his practice to diseases of the eye, ear, nose and throat.

Dr. H. K. Stockwell, formerly of Yarmouth, who has been east on a few weeks' visit, has returned to Washington to resume his practice.

Dr. E. E. Holt, Jr., who has recently completed his year's work as House Surgeon at the Maine Eye and Ear Infirmary, has associated himself in practice with his father, Dr. E. E. Holt of Congress Street.

Dr. Robert Hull, formerly of Portland, now located in Oklahoma, is East on a few weeks' vacation.

Dr. William Hall, who has completed a year's service as House Doctor of the Eastern Maine General Hospital, has opened an office in Winn, Me.

Dr. William Fahey, who has just completed a year's service at the Central Maine General Hospital, has opened an office in Lewiston, Me.

MAINE GENERAL HOSPITAL.

A vacancy in the corps of Internes is to be filled before August 1, 1911.

Applicants must be regular graduates in Medicine. Appointment is for one year, ending August 1, 1912, and the service offers exceptional experience in surgical, medical and special work.

Application should be made to the Superintendent, Charles D. Smith, M. D., Maine General Hospital, Portland, Maine.

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AND MENTION THE MAINE MEDICAL JOURNAL.

THE JOURNAL

OF THE

Maine Medical Association.

Published under direction of the Council of the Maine Medical Association.

DR. FRANK Y. GILBERT, EDITOR.

Associate Editors.

DR. C. R. BURR, Portland.

DR. H. E. MILLIKEN, Portland.

DR. F. H. JACKSON, Portland.

DR. H. E. GRIBBEN, Portland.

All papers, case reports, etc., should be type-written when possible.

Proof-sheets will be sent to the author when requested to do so.

Communicate with the printer early regarding reprints, as the best rates can be had during time that the paper is on the press for the Journal.

The Journal assumes no responsibility for opinions expressed by the authors.

VOL. *A.2*

SEPTEMBER, 1911.

NO. *12*.

Original Articles.

ANNUAL ADDRESS OF PRESIDENT.

BY E. H. BENNET, M. D., OF LUBEC.

(Read before the 59th Session of the Maine Medical Association at
Augusta, June, 1911.)

Members of the Maine Medical Association :

At the sixteenth annual meeting of this Association held in 1869, Dr. Tewksbury offered the following resolution which was adopted: "Resolved that the President shall make a communication to this Association, setting forth the state and condition of the medical profession in this state, with such suggestions in relation to its improvement as he shall deem appropriate; and, in case of default, he shall forfeit and pay to the Association the sum of fifteen dollars."

Professor Frederick Henry Gerrish, in his presidential address in 1902, said: "It is true that the time limit rule has usually been honored in the breach rather than in the observance when it comes to the address of the President, but certainly he whose duty it is to enforce the law upon others should himself yield it a willing obedience."

These precedents clearly define and limit the character and extent of the President's Address.

I believe we may learn a very valuable lesson from our commercial friends, who are in the habit of taking an account of stock at stated intervals, and thus determine their financial standing. This principle of inquiry or investigation will be of equal value to us if used to determine our standing as a society. Let us ascertain whether we are not overlooking some extremely important points, while we consider others more pleasant to discuss. In other words, let us determine whether we are doing our full duty as a state society, working for the common good of the general public, and the advancement of our profession.

I have compiled from data obtained from the Secretaries of the several County Societies and other sources, a table showing the number of physicians in each county; the number who are members in good standing of their County Society; the number of meetings held during the year, and the average attendance at said meetings.

I have used all available means to have those figures correct, still there must of necessity be an approximate element in them.

	Number of Physicians in County.	Number of Physicians in County Society.	Percentage.	Number of meetings during year.	Average Attendance.
Androscoggin,	95	44	46	9	16
Aroostook,	76	42	55	2	35
Cumberland,	210	124	60	4	45
Franklin,	26	18	70	3	8
Hancock,	48	20	42	5	8
Kennebec,	97	60	62	4	20
Knox,	42	21	50	6	13
Lincoln,	22	0	0	0	0
Oxford,	57	29	51	4	16
Piscataquis,	28	24	86	4	12
Penobscot,	138	57	41	8	30
Sagadahoc,	26	18	70	4	14
Somerset,	57	22	40	1	15
Waldo,	38	14	40	3	10
Washington,	48	26	54	3	15
York,	117	40	34	3	25
State,	1125	559	50	63	19

The footings of this table show 1,125 physicians in the state; 559 of these are members in good standing of their respective County Societies, making 50 per cent of the whole; one county, Lincoln, has no County Society; omitting this we have 51 per cent. for the state. New Hampshire reports 68 per cent., Vermont 60 per cent., Massachusetts 59 per cent., Rhode Island 70 per cent., and Connecticut 60 per cent., so we are considerably below the other New England States. Meetings were held during the year by the County Societies, the average attendance being 19.

These figures show a gain, still they indicate that a vast deal of work must yet be done before we have accomplished all we can in this direction. I would suggest that every member of the different County Societies consider himself a committee of one, whose duty it shall be to bring into his Society at least one member during the next year. If this simple and reasonable request be complied with, we will have every eligible man in the State a member of his County Society before our next annual meeting. Laying back on our oars and theorizing, will never overcome a single difficulty. Work wins the world's battles. "Labor overcomes all difficulties."

Do not understand me to express the opinion that all has been accomplished when we have secured the enrollment of a practitioner's name on the Secretary's book. This is but the initiation; he comes seeking "more light," and it is our duty to see that every opportunity is given him to develop and become a useful member of the Society and profession, and his duty to see that these opportunities are grasped and improved. "The man who knows it all and gets nothing from the Society, reminds one of that little dried up miniature of humanity, the prematurely senile infant, whose tabetic marasmus has added old age to infancy. Why should he go to the Society and hear Dr. Jones on the gastric relations of neurasthenia when he can get it so much better out of the works of Einhorn or Ewald? He is weary of seeing appendices, and there are no new pelvic viscera for demonstration. It is a waste of time, he says, and he feels better at home, and perhaps that is the best place for a man who has reached this stage of intellectual stagnation."

LEGISLATION.

Since our last meeting something has been done along legislative lines. Five meetings were held; two in Portland, three in Augusta, for the consideration of our legislative needs. The County Societies were all represented at these meetings, and a stronger co-operative spirit developed than has existed before, so far as I am able to judge. The outcome of this general discussion was a much improved, though not an ideal Medical Registration Act, the defeat of the Osteopathic Bill, the defeat of the so-called Pattangall Bill, and the "fatherless" bill, the object of which was to

prevent surgeons from charging more than one hundred dollars for any operation unless an agreement to the contrary had been made in writing before hand.

The money needed for defraying the expenses connected with this legislative work, was in part appropriated from the funds of this Society; the County Societies paid the expenses of their representatives at the different meetings. In my judgment, provision should be made for a permanent legislative fund, that would be available at any time, the State and County Societies each contributing their legitimate part. This fund should be subject to the draft of a legislative committee, composed of three members from the State Society, and the chairman of each of the County Societies' legislative committee.

We must not believe that legislative work has all been done; much remains. Who knows but what some poor benighted soul, thoroughly intoxicated with temporary success—dreamed of for years, and sought in every political camp in the state—may not introduce a bill into the next State Legislature prohibiting physicians from insuring their humble homes against loss from fire, or from carrying life insurance (if they have any it will be null and void after July). In consequence of the shadow cast last winter, let us be prepared for emergencies. "Early and provident fear is the mother of safety." Let the physicians see to it that the 60,000 crippled children of this state are not left entirely to the mercy of politicians.

PREVENTABLE DISEASES.

Much has been done to reduce the ravages of preventable disease, but have we reached the summit? Can we rest here and feel assured that we have done our full duty?

Statistics show that for the seventeen years from 1892 to 1909, the average death rate from typhoid fever was 199. The fatality rate from typhoid fever has a wide range. Allowing it to be 10 per cent., would give us practically 2,000 cases each year. Allowing the money loss in each case to be \$2500, we have \$497,500; but this is not all by any means. Granting those who recover six weeks' lost time at \$10 per week, \$90 for a nurse, \$30 for board, and \$75 for medical attendance, we have a sum total of \$459,255, making a money loss to the State of \$956,755, to say nothing of the intense suffering which follows in the wake of typhoid. What is actually being done to eradicate this preventable disease? Surely not as much as should be done; in small towns practically nothing. Here is work for your legislative committee to commence on.

A member of the Board of Health of New York City said to me last winter, "It used to be that the summer visitor would carry typhoid to the country, but now the summer people go the country and bring back typhoid

fever to their homes in the city." Here then is a factor we cannot afford to forget, as Maine is becoming more and more the playground of the nation. We must also remember that every case of typhoid is due to someone's carelessness or neglect; they are all preventable. It may be well to add that "antit-ypoid vaccination" is worthy of consideration, and is likely to be placed at the disposal of the civilian practitioner.

The average death rate for 18 years from diphtheria was 156. If these cases could be analyzed, I imagine a large percentage of them would be classified as laryngeal, where a diagnosis of croup had been made and antitoxin not used. If all cases of so-called croup lasting over a few hours were treated with large doses of anti-toxin, the mortality from diphtheria would be very much lessened. In most towns and villages quarantine is a flat failure, and not unfrequently this blame can be traced to the physician's door. Generally it is better for the physician to make a diagnosis from clinical symptoms and depend on the laboratory to determine when the quarantine should be lifted, than to wait for a laboratory diagnosis in the start. People get the impression that the doctor cannot diagnose a case of diphtheria without the aid of the laboratory, which has a tendency to weaken any opinion he may express, and frequently results in others being exposed while you are waiting for the laboratory report, and even this may not give the needed information. I do not mean to undervalue laboratory aid in all cases of this kind, but when the practitioner is a considerable distance from a laboratory it loses some of its value; besides, I believe most cases of diphtheria—even laryngeal—can be diagnosed from clinical symptoms.

TUBERCULOSIS.

The country has been stirred from center to circumference regarding tuberculosis; still in the fifteen years from 1895 to 1909, 18,208 have died in our state from this disease; an average of 17.30 per 10,000. True the decrease has been noticeably greater in recent years, but yet there remains much to be done. To emphasize this point I would quote a sentence from one of Carlyle's essays: "Our duty is not to see what lies dimly at a distance, but to do what lies clearly at hand." Are we fully in earnest about this matter? Are physicians all over the state alive to the importance of early diagnosis, sanatorium treatment, quarantine, disinfection and report of cases?

I have been told that a bill is soon to be introduced into the New York State Legislature, to the effect that all persons contemplating marriage shall first secure from a reputable physician a certificate stating that each party is free from any form of transmissible disease. Let us hope that this will soon become not only a state, but a national law. No one step would do more toward the eradication of tuberculosis.

Another important matter in this connection which physicians should consider very carefully and unite their efforts to secure, is medical supervision of our public schools. So long as this remains optional as at present, it will be null and void. The advisability of medical inspection of school children is no longer an unknown quantity; it has been proven of inestimable value and should be made compulsory. More than this, school buildings should be inspected and towns obliged to make them sanitary in every particular.

SALE OF NARCOTICS.

I believe there is altogether too much laxity in connection with the sale of narcotics, in consequence of which we have many cases of drug habit. This is a medical, not a political question; and this Association should take a decided stand in relation to it, and see that more stringent rules are not only enacted but enforced.

HOSPITAL COMPETITION.

There is a feeling throughout the state that the hospitals are unfair competitors. Physicians complain that certain persons who are able to pay a fair fee will go to a hospital and receive charity in the form of services, when they would disdain to accept aid in any other way. We believe our hospitals all need more money, but is it fair to ask the state or individuals to contribute toward the support of well-to-do people, who have much more to pay their bills with than the donors? This matter should be investigated, the financial standing of all applicants ascertained, and those who are able should be charged for treatment, either medical or surgical, in addition to that charged for care. The money obtained from these patients should be used to secure accommodations for those who are absolutely unable to pay anything, and must suffer in consequence. It is useless to bring matters of this kind to your attention from year to year, as this has been, and do nothing more. It is the duty of this Society, of the physicians of this state, to eliminate politics from these problems and see that they are properly adjusted.

In my opinion, the hospitals might be made of much more assistance to the general practitioners who send patients in for treatment, if they required with the patient a carefully prepared statement of the case, made out on a proper blank gotten up for that purpose, showing all essential facts.

After admission, the hospital staff should fill out a duplicate sheet, to which should be added details of all treatment, whether operative or medicinal. There should be three of these blanks; the first made out by the

physician referring the patient, the second and third exactly the same in all particulars, made out at the hospital—one for the hospital records, and the other to be sent back with the patient as a guide for the attending physician—also showing him wherein he erred in his initial report.

It may be argued that the physician should accompany his patient. Very true, but in many cases this is impossible; and even then a carefully prepared written statement should be submitted with the patient and remain a part of the hospital records. A plan of this kind would stimulate the physicians to be more careful and thorough in their examinations, and aid them in getting into systematic habits. It would further enable them to compare notes with the hospital staff and benefit thereby. As it is to-day, the patient goes in without a word from the physician, and returns without a word from the hospital staff; each seems to be an independent factor. The hospital men may argue that they have not the necessary help; then I answer that there are plenty of young medical graduates who would be glad of hospital training. If necessary let the number of internes be increased. The plan would be economical rather than extravagant, because it would secure a more hearty co-operation with the rank and file who furnish material.

JOURNAL.

At the last annual meeting it was decided to publish a Journal. The first issue came out in December, 1910, since which time it has been issued monthly. This was a new venture. We believe a step in the right direction. Will it be a success? That remains largely with the individual members of this Society. "Tis not enough to help the feeble up, but to support him after." Much has already been done, still more remains to be done, and the editors cannot do it all; you must lend a hand. "Light is the task when many share the toil." Every County Society has an interest in this Journal; it is their messenger to the other County Societies, the State Society, and the profession generally. Is it not well to be conservative in the sense that Douglas Jerrold puts it when he says: "A conservative is a man who will not look at the new moon, out of respect for that ancient institution, the old one." This is a new Journal; look at it rather from the view point of progress, for the true law of the race is progress and development.

MEDICAL SCHOOL OF MAINE.

According to the American Medical Directory, 38 per cent. of the physicians of this state are graduates of the Maine Medical School, among whom are some of the most noted men of New England.

This school has served the inhabitants of this section faithfully and well. Its teachers, from Allen and Smith down the entire line, have been

faithful, honorable, able men, always rendering efficient service, as proven by the work of their students. It costs more to run a medical school now than a quarter of a century ago. No medical school should ever be run cheaply. It is not true economy. It would be the worst kind of extravagance and waste. We understand the school needs funds to enable it to remain where it always has been—in the front rank. This is a question that affects not only the faculty and Board of Directors, but should appeal to every member of this Association—yes, to every physician in Maine. I believe it is our duty to render every service possible that will aid the officials to sustain the school and secure for it a position second to none, in net results.

CONSERVATION OF HUMAN LIFE.

Much has been said during the last decade, and especially the last half of it, regarding conservation, but in all this we hear but little of the conservation of human life, and nothing in reference to one phase of it. The medical profession holds an enviable position in regard to its efforts to save and prolong human life. Who has not heard of Harvey, Jenner, Morton, Pasteur, Koch, Ross, Reed, and many others? These men are not only known to our profession, but to the reading public, and history for ages to come will record their noble deeds and self-sacrificing efforts to benefit the human race.

Would it not seem strange if one would find in the schools of art, some whose whole lives were spent in marring the work of the masters, in bringing stains of the deepest character on the entire profession, stains so deep and dark that they almost hide from view anything of real artistic beauty. Then how much more strange must it seem to find in the medical profession some whose sole aim is to destroy human life.

We all admire a brave man, one who can stand and face you squarely, look you in the eye unflinchingly, and express his opinion of you—no matter what it may be—in plain, emphatic words. He gives you a chance to defend yourself, to explain, to correct wrong statements, or if need be to sacrifice his life to establish his honor.

Who does not despise the coward as intensely as he admires the hero? Who of us loves a sneak who follows you until you reach a dark, unfrequented spot, where he can deal a stealthy, deadly blow in the back where there are none to see? What then shall we say of this creature—he is not a man—who snares the expectant mother, induces her to visit his most secluded and private room where there is little light, things not aseptic—the atmosphere speaks of guilt and crime, and there unhesitatingly destroys a human life that has no power to resist, to make public the crime, nor power of any sort to punish the basest of all criminals? The fact that this villain

is sought by those who need his services—perhaps to cover their shame—is no excuse whatever. If the goods were not there, the would-be purchaser would not be in evidence; his or hers is the chief offence.

If the veil could be withdrawn and the dark blood-stained page be exposed to light of day, the facts there recorded would cause the bravest to shudder; they would even cause the culprit to quake. It is useless for any of us to question whether this picture is overdrawn, whether it is quite so bad, for one thousandth part has never been told—and we all know it. The legitimate question is, what can be done? The evil can be eradicated if the profession will act as a unit; it cannot be if a considerable part is ready to shield the guilty.

If every County Society in the state will appoint a committee to take charge of investigations, and then every practitioner in said County report all suspicious cases that come under their observation to this committee, and they honestly investigate, and have the support of their colleagues, it would be but a short time before these scoundrels could be brought to justice, and then the physicians—not one or two, but all—demand that the guilty be punished. There is influence enough in our profession to make some such plan effective, and if we do not exert that influence for good, then we are responsible for the crime. Let us see that this blackest of all stains is removed from our noble profession, or else be willing to share our part of the blame. No matter whether the culprit lives in a brown stone front, rides in a seven thousand dollar automobile, drives a four-in-hand, passes the contribution box on Sunday, exhorts people to live righteous lives, moves in the best society, holds many important offices in church and state, is a social leader, a power in politics, is dressed in fine linen—a would-be spotless character—or whether he lives in a log cabin, cooks his own food, without any of these distinctions or luxuries, let justice be dealt to all, and dealt by the combined efforts of all honorable members of the profession. The victory is sure; you hold the reins. "Justice is passionless and therefore sure; guilt for a while may flourish; virtue sinks 'neath the shade of calumny and ill; justice at last, like the bright sun, shall break majestic forth, the shield of innocence, the guard of truth."

In conclusion, gentlemen, I wish to express my sincere thanks for the honor conferred upon me, by my election as President of the Maine Medical Association. I realize more fully than others can, that the service has been defective and inefficient; that the "spirit indeed was willing but the flesh was weak."

I would further acknowledge with extreme gratitude the very courteous manner in which I have been received by the members of the profession at the different County meetings I have had the pleasure of attending, and only regret that I could not visit all.

I sincerely believe this Society has before it greater activity, broader usefulness, increased co-operation, and the securing of more benefits for its individual members than in the past, even. Let my parting word be the sentiment expressed by Ex-Judge Elbert H. Gary, chief executive official of the United States Steel Corporation, a few days ago, that "Co-operation is bound to take the place of competition."

THE ACUTE ABDOMEN.

BY JOHN B. DEAYER, M. D., LL.D., PHILADELPHIA, PA.

(Read before the Knox County Medical Society, Rockland, August 8, 1911.)

A large part of the diseases which the practitioner is called upon to treat is made up of affections of the abdominal viscera and particularly of the alimentary tract and its appendages. In no other field is there greater need for correct diagnosis and prompt action, and no other group of diseases affords such brilliant opportunity to relieve distress and save life as the acute abdominal affections. Expectant treatment, so efficacious in many disorders, is here capable of an immense amount of harm and the sins of omission are even more culpable than those of commission.

In the diagnosis and understanding of abdominal disease individual experience, though great and valuable, must be supplemented by the recent great advances in the physiology and pathology of the digestive tract. The greater number of these advances we owe to surgery, both clinical and experimental. Physiology owes most to surgical experiment, while from clinical surgery there has emerged a new pathology, the pathology of the living, which is as different from the old pathology as the living man is different from the lifeless habitation of his spirit. It is quite as easy to determine the motives and actions of a man during life by inspecting his corpse as to unravel the long chain of abdominal pathology from its end results as disclosed upon the pathologist's slab. Living pathology is pathology in motion. It is more interested in the beginnings and in the course of pathological changes than in their results, and is the basis of the art of prognosis, the neglect of which is one of our present day sins.

The greatest change in our conceptions which has been brought about in recent years is the recognition that the old group of digestive disturbances and nervous disorders was simply a confession of ignorance regard-

ing the frequency and nature of organic disease. To-day, the diagnosis of indigestion is discredited and must be replaced by the primary causes of dyspepsia, either general or local. We have recognized appendiceal dyspepsia, gall bladder dyspepsia, pancreatic dyspepsia and the dyspepsia of inflammatory and malignant disease of the pyloric region. A second group is due to ptoses of the abdominal organs and to the kinks thereby introduced into the alimentary drainage system. Mr. Lane has recently called attention to the frequent presence of abdominal bands which may embarrass the normal peristalsis of the intestines. Thus the list grows of definite pathological causes of the so-called gastric and intestinal neuroses.

Similarly the idea of idiopathic peritonitis has long since ceased to have any weight in the mind of the diagnostician of abdominal diseases and the role of the three chief sources of intra-abdominal inflammation, viz, the appendix, the Fallopian tubes and the gall bladder has been made clear.

We are now in a position to state definitely that where severe disease of the vital organs, such as the lungs, heart or kidneys, is absent the vast majority of digestive disturbances, whether they be motor, sensory or secretory, can be laid at the door of some definite intra-abdominal abnormality which is best treated, and often successfully treated only by surgical means.

A clear understanding of these facts will enable the physician to be on the look out for the acute emergencies of abdominal disease, will prompt him to prevent them by remedy in the earlier stages, or if they supervene without warning or by reason of having accepted the chance, he will be in instant readiness with a presumptive diagnosis and a clear idea of the proper treatment.

By far the most common acute abdominal emergency is appendicitis, and I am convinced that on the part of our medical brethren it is the worst treated. I am not referring to the reprehensible practice of delay to see whether the patient may not be tided over the attack without operation. Fortunately a large and ever growing section of the profession have taken a firm stand against this method of treatment which will undoubtedly come to be regarded in the course of time, if not already, as a species of malpractice. I refer to the free and indiscriminate use of purgatives in the early stages of the disease. Very rarely do I see a case of acute appendicitis that has escaped purgation by the physician first called in attendance. Castor oil, calomel and saline draughts are the drugs most frequently employed, and if the stomach with profound wisdom rejects the first doses others are given until one or more evacuations are triumphantly secured. In my experience patients who have been purged most do worst. There is no doubt that purgation and perforation are closely associated. The aperient pill slays more than we have any idea of. This is one of the strange

inconsistencies that seize upon the profession en masse. There is no rational basis for it, and as I say, experience shows it to be harmful. How many cases of localizing or diffusing peritonitis which have not been purged does one see?

The first principle of the treatment of an acutely inflamed member is rest and protection. We do not massage a boil nor do we recommend athletic exercises for acute articular rheumatism. The inflamed appendix also calls for rest and protection and the body responds by stiffening the overlying muscles, by a disinclination to partake of food, and by the rejection of food already in the upper alimentary tract. Wise treatment aids in this object by withholding not only nourishment but even water by mouth. This is in accord with the physiology of the digestive tract. In early embryonic life the alimentary tube is divisible into three parts, the fore gut, the mid gut and the hind gut. The fore gut gives rise in adult life to that portion of the tube extending as far down as the second portion of the duodenum. The mid gut develops into the remainder of the duodenum, the small intestine, the cecum and the colon as far as the left end of the transverse colon. The remainder is derived from the hind gut. It is thus seen that in the adult there are no morphological marks of this embryonic division. In function, however, the division is still maintained. The foregut is concerned with the mixing and preparation of food for digestion. The mid gut digests and absorbs it and the hind gut stores the residue and expels it. It has been demonstrated, however, that the absorption of water takes place chiefly in the large intestine. As Moynihan succinctly puts it, the small intestine appeases our hunger and the large intestine slakes our thirst, but 10 per cent. of the intake of fluids is absorbed in the stomach. If, then, water must pass down the intestinal tract into the large intestine it is readily understood that the ingestion of water is contrary to the maintenance of physiological rest for the appendix and adjacent bowel. Even very small quantities of water, such as can be obtained by sucking ice, are capable of exerting active peristalsis extending the whole length of the tube. If it is desirable to go to the length of withholding all food and drink by mouth, in order to obtain quiet for the appendix, how much greater is our obligation to omit anything in the nature of a purge which will give rise to violent peristalsis and the accumulation of fluid in the bowel.

It has been shown, also, that during the action of purgative drugs, the bacterial content of the bowel is increased and enhanced in virulence, quite the opposite effect from that which we desire. It may well be that the congestion of the bowels incident to aperient action exerts an accelerating influence upon acute inflammatory processes in the appendix, though on this point we are able to speak less positively. Both experience and reason, therefore, speak against purging patients ill with appendicitis. The fact

that many recover under this treatment is but another evidence of the wonderful power of Nature to withstand maltreatment.

It is usually advisable to rid the large intestine of its contents, and this may be quickly done by an ordinary enema. The bowel then is in a condition to absorb the fluid which must be given by rectum to supply the bodily needs when none is allowed by mouth.

This attitude regarding purgation is a complete reversal of the belief held up to a very few years ago. In fact you will find laxatives recommended in the last edition of my monograph upon this subject, published in 1905, but they will find no place in the forthcoming edition in the treatment of the acute disease before operation.

These strictures regarding the use of purgatives in appendicitis apply as well to most of the acute surgical abdominal emergencies. None of them require early purgation. The majority are distinctly harmed thereby. Especially is this true of all perforative accidents of the gastrointestinal tract. It requires no argument to convince one of the folly of using any measure that would have the effect of making a privy of the abdominal cavity. Quite as disastrous is the use of these drugs in obstruction of the bowels. This is well understood and it seems tiresome to have to mention it, yet I frequently have cases of obstruction referred to me who have been plied with purgatives in a vain attempt to move the bowels. In these cases the intestines above the obstruction are filled with gas and fluid. Bacterial activity is at its height, and the harmful poisons to which the mortality of obstruction is largely due are present in great abundance. The intestines also are distended, atonic and the lowered vitality of their walls permits easy egress of microorganisms which soon set up a diffusing peritonitis.

When purgation was considered appropriate early treatment for acute appendicitis, there might have been some justification or palliation for these errors, for I well know that there is often great difficulty in differentiating perforated gastric or duodenal ulcer, acute pancreatitis, certain cases of obstruction and at times other intraabdominal catastrophes from acute disease of the appendix. Since, however, it is apparent that acute appendicitis also is improperly treated in this manner, there can be no reason for their use save inability to differentiate between surgical and non-surgical acute abdominal disease. The rule is simple; never purge in acute surgical disease of the abdomen. This greatly simplifies the problem of treatment. That there are acute abdominal disturbances which require early and thorough purgation, there is no question. These are the cases of acute gastroenteritis and the so-called ptomaine poisoning. Acute indigestion has no status as a diagnosis. It is used to cover up the pathological cause in the most widely divergent conditions. Uremia, cardiac collapse, with its associated gastric symptoms, and all the acute surgical diseases of the abdomen, are loosely grouped under this name.

It is but rarely impossible to determine whether an acute abdominal disease belongs to the surgical group of the acute abdomen or to the medical affections. In gastroenteritis and food poisoning, as a rule there will be a history of dietetic indiscretion. Often there may be more than one individual seized simultaneously. The pain is diffuse and colicky in character at first. Nausea and vomiting may occur and usually precede the onset of pain. Tenderness is usually widespread but slight, and not markedly circumscribed. Reflex rigidity is also slight, if present at all, and is not localized. An important point is the effect of pressure, which usually eases the non-surgical affections, while it makes the pain of surgical disease much worse. Diarrhœa is almost invariable in gastroenteritis, but is an infrequent accompaniment of the surgical affections. The temperature, pulse and leucocyte count are of little aid in differentiation, since all are elevated to a variable degree in a wide number of abdominal affections. In the severer forms of gastroenteritis and food poisoning, the systemic effects are more profound. Extreme prostration and collapse are frequent. The subjective symptoms seem out of all proportion to signs discoverable by examination, and the patient is restless under the pain rather than quiet, in order not to excite it, as in acute inflammatory surgical diseases.

The diagnosis rests chiefly upon the sudden onset of so-called sick stomach, with nausea and vomiting, followed rather than preceded by pain, and almost invariably accompanied by diarrhœa and debility or prostration.

The affection lacks any of the characteristic localizing points in the history and examination of the various members of the acute surgical family of the abdomen. In this respect it behaves somewhat like certain cases of intestinal obstruction, but is sufficiently differentiated from the latter by the behavior of the bowels. It is noteworthy, however, that there may be one or two evacuations after obstruction has taken place, the material expelled being of course that which is distal to the point of obstruction. This sometimes is confusing, though it by no means simulates a diarrhœa. The first duty of the practitioner therefore, when called to a case suffering from acute abdominal pain, is to differentiate between a non-surgical and a surgical condition. Besides the instances already mentioned of acute non-surgical abdominal disease, there are rare conditions, such as the gastric crises of tabes and of Henoch's purpura and the simulation of abdominal lesions by certain cases of pneumonia, especially in children. It is certain, however, that in the large majority of cases, abdominal symptoms of any moment are due to conditions, the safe treatment of which is becoming more and more the province of the surgeon. The burden of proof, therefore, lies upon the diagnosis of non-surgical disease, and the greatest caution is necessary before consigning the patient to a treatment well adapted to gastroenteritis, but calculated to enhance the severity of surgical diseases.

The possibility of appendicitis should be entertained in every case of abdominal pain. The diagnostic triad of pain, vomiting, and local tenderness with rigidity, are usually present, and render the diagnosis easy as a rule. Difficulties may arise however, from

1. An unusual location of the appendix.
2. In fulminating cases, when extensive peritonitis rapidly ensuing may obscure localizing signs and symptoms.
3. In conditions which closely simulate appendicitis.

The tenderness and rigidity of appendicitis are by no means always located at McBurney's Point. These signs are not often marked until the inflammatory process has involved the serous covering of the appendix, and by it has been transmitted to the adjacent parietal peritoneum. It is known from the researches of Lennander and others that the visceral peritoneum is insensitive to pain, while the parietal peritoneum is highly sensitive.

If the appendix be long, and the inflammation be chiefly confined to the tip, a condition not at all infrequent, the maximum tenderness is found at the point where the tip happens to be; if in the pelvis, the symptoms are chiefly pelvic; if on the left side the signs are located in this region, and if the appendix point upward the pain on pressure may be exactly in the situation of the gall bladder, and such so-called "high appendices" often cause the diagnostician to believe that the attack is one of acute cholecystitis.

A few cases are seen which present left-sided symptoms and signs throughout the course. These are due to a left-sided situation of the appendix, the result of acquired or congenital causes. Four forms are distinguished. The rarest is the condition of situs inversus. Next in order, but also rare, is the condition of left-sided position of the cecum with its appendage. The third form is seen most frequently in children, when the appendix may be excessively long, and stretch obliquely across the pelvis behind the bladder into the left side. When the inflammation affects the tip primarily, as above stated, the inflammation may be confined to the left side. Finally in adults, as the result of previous inflammation, a mobile cecum may be drawn into the left side.

In fulminating appendicitis, the diagnosis may be difficult, because of the overshadowing of local signs by wide-spread symptoms. Early gangrene or perforation may set up a peritonitis of great severity by the time the patient is first seen. Particularly is this true of perforation near the base of the appendix, which gives rise to a particularly severe form of peritonitis. In such cases the abdomen often presents the early diffuse tenderness and board-like rigidity which is more characteristic of perforation occurring in the pyloric region.

Severe peritonitis in the lower portion of the abdominal cavity, or pelvis,

causing paresis of the bowels and distention, may simulate very closely obstruction of the bowels from mechanical causes.

A disastrous mistake in acute appendicitis is to regard the cessation of pain which commonly results when the appendix becomes gangrenous, as an indication of the subsidence of the disease.

In the diagnosis of the atypical forms of appendicitis, we are helped by bearing in mind that it is the commonest cause of peritonitis, and if symptoms pointing definitely to some other organ be absent, the chances are greatly in favor of appendiceal diseases. At times we will be misled, notably in the case of women, since acute right-sided tubal disease may at times simulate appendicitis very closely. A vaginal examination, which should never be omitted, should differentiate between the two. One of the most difficult conditions to differentiate is a small right-sided ovarian cyst, twisted on its pedicle. This will give extreme pain, nausea, vomiting, and tenderness with spasm in the right lower quadrant. Owing to the rigidity, it may be impossible to palpate the cyst through the overlying wall, and it may be too high for vaginal touch. I have on a number of occasions missed the diagnosis, nor do I feel at all certain that I shall not do so again. One could hardly make the mistake, however, of considering it other than a surgical condition calling for immediate treatment.

Less common, but more dangerous than appendicitis, are the perforations which occur about the pylorus. Since accurate means of dividing the stomach from the duodenum have been found in the pyloric veins, it has been found that duodenal ulcer, instead of being a great rarity, is actually more common than gastric ulcer, and as a disease it is more frequent than anyone had supposed ten years ago. Mumford gives convincing records for regarding it as common as acute appendicitis. The diagnosis is made chiefly by the history of a certain kind of indigestion, consisting of pain coming on at intervals of two to six hours after the ingestion of food. Frequently the history extends over a period of years, with remissions or freedom from symptoms and exacerbations at irregular intervals. As a rule these patients have been regarded as victims of hyperchlorhydria, and the pain is ascribed to the excess of acid. In this connection Moynihan's statement, that "persistent recurring hyperchlorhydria is duodenal ulcer," is interesting. When a patient who may have presented these symptoms for one or two years, is suddenly seized with excruciating pain in the epigastrium, soon becoming general, and board-like rigidity of the overlying abdominal walls, especially marked upon the right side, high up, a presumptive diagnosis of perforated ulcer may be made. Nausea, but especially vomiting, are the exceptions in perforated duodenal ulcers. Owing to the lines of attachment of the mesentery, the infected fluids are prone to drain into the region of the cecum, and a common mistake is to regard these

cases as acute appendiceal peritonitis. We must remember, however, that a percentage of perforations occur where no history of previous indigestion can be elicited. It is rare for recovery to ensue if operation is deferred more than 24 hours after perforation has occurred.

Acute upper abdominal symptoms may also be due to the wandering of a gall stone through one of the biliary passages, to acute cholecystitis, with or without stones, and to the acute or ultra-acute forms of pancreatitis. Perforation of the gall bladder is fortunately rare, though it occasionally occurs. Gall stone colic in its typical form is so characteristic that the diagnosis is rarely missed. It is safe to say, however, that only a minority of cases give rise to characteristic symptoms. Thus, jaundice which is the most characteristic symptom, is present in less than $1/3$ of all cases, and often attacks occur which give rise to no jaundice.

Painful jaundice, moreover, is no certain sign of cholecystitis. It may occur in simple cholangitis without stones, or, it may be due to recurring exacerbations of chronic pancreatitis.

I have several times seen exact simulation of the well-known symptoms of stone in the common duct by this form of pancreatitis. The description and differential diagnosis of all these conditions would require too much time for the scope of the paper; suffice it to say, that they should be always present in the mind of the practitioner, when attempting to solve the cause of acute upper abdominal pain.

Perhaps the most difficult of diagnosis of the acute abdominal emergencies is intestinal obstruction when the cause of obstruction is not apparent, as it is in strangulated hernia. On the other hand, not only does failure to make the diagnosis invariably result in death, but for practical purposes a late diagnosis is apt to be as bad as none. If the diagnosis could be made early and treatment instituted at once, this would be one of the least deadly affections, since no other is more dependent upon surgical intervention or responds more satisfactorily. As a symptom of obstruction we would be well off if fecal vomiting were removed from our books. It should be a source of mortification to us if we permit our patients to show this symptom, for it means failure on our part to recognize the condition in its least dangerous stage. Given a patient who is suddenly seized with acute colicky pain coming on at short intervals with considerable regularity and synchronous with peristalsis, who is nauseated and vomits without onset of diarrhoea, but on the contrary is unable to secure a bowel movement, the diagnosis of obstruction may be made with great certainty. Particularly is this true if examination of the abdomen reveals the scar of a former operation which may be responsible for intra-abdominal bands of adhesions. The temperature and pulse of intestinal obstruction are non-characteristic, except very early in the case when pulse is slow and temperature frequently subnor-

mal. The physical examination in the early stages reveals nothing as a rule, except in those forms of obstruction where tumor is present. The leucocyte count is elevated as in inflammatory disease. Distention gradually occurs but in a marked degree is a late symptom. Proper treatment, therefore, is based upon a correct interpretation of a few symptoms rather than on positive signs. This is a principle which runs through all successful practice. In the acute abdominal emergencies, of which I have mentioned only a few of the more common, fearing to be exhaustingly exhaustive, quick action should be based upon reasoned probability rather than upon observed certainty, if our object is to save patients rather than to play the role of mere spectators of biological phenomena.

TUBERCULOSIS OF THE LUNGS IN INFANTS AND YOUNG CHILDREN, 1910.

By T. J. BURRAGE, M. D., OF PORTLAND.

Since the crusade against pulmonary tuberculosis has assumed such large proportions, the disease among infants and young children, as well as among adults, has been receiving its due share of study and investigation. No doubt tuberculosis in childhood is most apt to choose the bones and joints, or glands and meninges, rather than the lungs, and yet recent investigations have shown that pulmonory tuberculosis is much more frequent than was formally supposed. Previous statistics for children under five years of age, who came to hospitals for tuberculosis of the lungs, was from 1 to 6 per cent. Holt's latest statistics give 41 per cent. for dispensary children with pulmonary tuberculosis, or an increase of 35 per cent. Undoubtedly from 20 to 50 per cent. of the children of tuberculous parents are suffering from the disease in some of its forms.

The question of mode of infection in tuberculous infants and children is of the greatest interest and importance. Heredity, which years ago received the blunt of blame for infection, to-day is scarcely regarded as having any part in the spread of the disease. And yet, the passage of living tubercle bacilli from mother to fœtus certainly does occur, and twenty cases in man and several hundred cases in cattle are substantiated in every particular. Along this line, the experiments of Friedma are interesting as proving the possibility of infection by the means of tubercle-carrying spermatozoa. He injected living tubercle bacilli into the vaginas of guinea-pigs immediately after coitus and killed them within a week. In all the embryos tubercle bacilli was found, although the generative organs of the mother were healthy. It is a well known fact that in genital tuberculosis of the male, the semen is always infected, and tubercle bacilli may even be found

in the semen in cases of generalized tuberculosis without any lesions of the genital organs. The possibility, therefore, of transmission from father to offspring is regarded as definitely proved.

Of great importance in the discussion of hereditary transmission is the existence of placental tuberculosis. Thirty cases with typical lesions are on record reported by a few investigators, most important among them being Schmorl and Geipel, who have themselves observed nearly one-third of this number. The short list of reported cases should not be taken as a criterion for the prevalence of this condition, for very few examinations have hitherto been made, and naturally much time and great care are required to determine whether or not tuberculosis exists in so large an organ as the placenta. It is very probable that the systematic examination of placenta from tuberculous mothers would show corresponding lesions. The broad blood sinuses of the placenta furnish most favorable places for implantation on account of their anatomical structure and arrangement. Tubercle bacilli can enter the chorionic villi without producing any lesions, just as they can pass through the intact mucous membranes of the intestine; and so enter the circulation of the foetus. Typical tubercles are not formed in the decidua, but degeneration and necrosis of decidual cells take place in faecal areas, which in late stages go on to complete caseation. It has been shown by different investigators that tubercle bacilli may be found in the circulation of the foetus without the presence of tubercular lesions. If placental tuberculosis is proved to be much more common in the future than is now generally supposed to be the case, it will certainly occupy an important place in the etiology of the disease. This brings us to the interesting and important discussion of the latency of the tubercle bacilli in the body of young children.

Baumgarten upheld this principle of early infection and latency as far back as 1898, and Von Behring, at the present day, believes infection in infants takes place in the first few days of extra-uterine life. He also declares that the tubercle bacilli can lie dormant in the lymphatic nodes or other tissues of the body for a long time, and that at a puberty or at times of a special strain or exposure, they can become activated and produce typical lesions.

We must now consider the question of "pre-disposition" to tuberculosis of which one hears so much at the present time. This term is a somewhat uncertain one, but means that the children of tuberculous parents, though free from the disease itself, are a more favorable soil for the reception and growth of the tubercle bacillus, than in the offspring of the non-tuberculous. Just when the line will be drawn between the tuberculous and the predisposed will be hard to say, and, moreover, the children of tuberculous parents are apparently more susceptible to all infectious diseases. Un-

doubtedly, there is some element of truth in an inherent predisposition, but it must not be considered too seriously.

The pathway by which the tubercle bacilli enter the body of the child is a much debated question to-day, some authorities holding the ærogenic theory, and others, the enterogenic. Von Behring goes so far as to declare that practically all infection takes place through the alimentary canal, and that even bacilli which are deposited in the upper air passages by aspiration are all washed down into the alimentary tract, from whence they enter the lymphatics and then pass to the general circulation. Weichselbaum and Wilemsky look upon all cases involving bronchial nodes, together with the lungs, as of intestinal origin, since it has been proved that the bacilli can pass the intestinal wall and even the mesenteric nodes without apparent lesion, though the nodes are demonstrably tuberculous, as shown by animal inoculation. On the other hand we have a large number of investigators and a great mass of experimental evidence pointing towards the ærogenic theory as the true one for pulmonary tuberculosis. By this group of authorities, it is claimed that inhalation of tubercle bacilli in the moist state causes most pulmonary and bronchial gland tuberculosis. Anatomically it has been proved that the bronchial nodes have no connection with the cervical and abdominal group and that infection of the bronchial groups from these sources is only possible through the general circulation. Flugge's experiments, moreover, show that tubercle bacilli reach the lungs very slowly by way of the intestinal tract and that relatively large doses are required to cause infection, whereas exceedingly small numbers will cause pulmonary tuberculosis when inhaled in the moist state.

From all this evidence we glean the following facts. The weight of opinion as regards mode of infection in pulmonary tuberculosis in children points to the inhalation of moist droplets containing tubercle bacilli as the most frequent cause. Undoubtedly some cases of bronchial gland and pulmonary tuberculosis are of enterogenic origin, but in these cases it is usually a part of generalized tuberculosis. The bacilli after passing the bronchial mucous membrane enter the blood stream or the lymphatics and are either carried to parts of the lung itself direct, or else enter the bronchial lymph nodes and secondarily invade the pulmonary tissue. Tubercular infection through the adenoid tissue of the pharynx, primarily only reaches the cervical nodes, inasmuch as there is no anatomical connection with the bronchial nodes. Infection by way of the intestine may produce tubercular ulcer of the bowel, or the bacilli may pass the intestinal mucosa without lesions and the mesenteric nodes as well, entering the general circulation by way of the thoracic duct.

Another field of discussion which occupies much attention at present is the question as to whether the infecting bacilli are of the bovine or human

type. The most thorough research along this line seems to have been conducted by Saffky. He made a study of the bronchial and mesenteric lymph nodes from a series of 300 autopsies on children. The nodes were examined for tubercle bacilli by the inoculation method, and the isolated bacilli tested as to whether they were of the human or bovine type. The result showed conclusively that the human type of tubercle bacillus was almost invariably present, only in two of 59 cases was the bovine bacillus found. This proves pretty conclusively that it is the human and not the bovine type of tubercle bacillus which is the great danger in pulmonary infection of children.

The pathologists have made a very careful study of the lesions in the lungs. Martha Wollstein, pathologist to the Babies' Hospital, New York City, has studied most carefully the condition as it exists in infants. She gathered her findings from 185 post-mortems on infants under two years of age. The pathological picture in the lungs varied from discrete miliary tubercles to conglomerate tubercles forming cheesy areas of tuberculous pneumonia with or without cavities. Sometimes all forms were combined in one lung. She found the oldest lesions on the right side in 95 cases on the left side in 66 cases, and equally in both lower lobes in 3 cases. The right upper lobe was more frequently afflicted than the middle and lower lobes. As regards bronchial lymph nodes, the largest were found on the right side, in the ratio of three to one. This is accounted for from the anatomy of the right bronchus, which being straighter than the left facilitates aspiration. White and Carpenter present some very interesting facts in regard to "Pulmonary Cavities in Infants." This material was gathered from 75 autopsies on tuberculosis infants under two years of age, at the Philadelphia Children's Hospital. Cavities were found in 12 out of the 75, or 16 per cent. They found that caseous broncho-pneumonia was the most frequent condition, while acute miliary tuberculosis and chronic tuberculosis with fibrous changes were rare. Advanced caseous lesions were usually confined to one lobe or one lung with less marked lesions in the other lobes. Cavities are the result of acute softening of the central part of the caseous mass, which in a fluid state is cast off through the bronchial tube. Softening is due to secondary infection with pus organisms. The walls of the cavities are irregular in outline, and at one point communicate with a bronchus. The size varies with the chronicity and area of the caseous lesion. Fibrous tissue formation in the walls of the cavity does not take place to any extent as it does in the adult. The younger the individual, the more extensive the involvement, and the more rapid the course of the disease. The most frequent sites of the cavity were as follows: lower lobe 5, upper lobe 4, middle lobe 2.

The symptoms and signs of pulmonary tuberculosis in infants and

young children are often not at all indicative of the disease. The general appearance of the child is that of marasmus with marked dryness and sometimes yellowness of the skin. Often pulmonary signs are lacking altogether, or they are those of ordinary bronchitis or broncho-pneumonia. The cavities described above may not show themselves by any physical signs. Acceleration of respiration to a considerable degree with cyanosis are rather constant findings. Cough may or may not be present. Sputum, especially in infants, is difficult to obtain, but secretions may be secured by passing a catheter into the pharynx and straining the mucus with drain for tubercle bacilli. In the more generalized cases the spleen and sometimes the liver are enlarged and palpable. The older the child the more closely do the signs and symptoms approach those of the adult type, which need no special reference in this paper.

Diagnosis, therefore, is often difficult from the obscurity of the signs and symptoms. One of the most important points to be observed in considering these cases is the presence of open tuberculosis in some other member of the family. Under such conditions probably 30 to 50 per cent. of the children will contract the disease. Apparently, only a very short exposure is necessary for infection to take place. Wasserman reports a case of fatal infection in an infant who developed tuberculosis after living with a tuberculous person for 8 days. Hoyd and Boredich examined 679 children, of whom 470 were living in families which contained a consumptive, and 179 of which were living in families in which there had been recent deaths from tuberculosis. Of this number 36 per cent. showed definite signs of tuberculosis and more than 66 per cent. of the entire number showed symptoms of the disease. All but two of this series were of the adult type.

Probably next in importance to the presence of an infecting focus in the family, is the finding of a constant elevation of temperature which is otherwise unexplainable. This becomes especially suggestive if it is coupled with a persistently rapid pulse. These two symptoms should point to some hidden focus, which even the most careful physical examination would fail to locate. The phthisical habit is not seen until late childhood and hemoptysis is rare. These children often have a very dry and somewhat yellowish skin, which may be associated with large lymph nodes, especially of the neck. The presence of joint or bone tuberculosis is of course a help when pulmonary signs manifest themselves. The finding of tubercle bacilli, as has been said, is a rather difficult process, though they should be searched for, not only in the sputum, but also in the fæces or urine. Of the various forms of tuberculin for diagnostic purposes, the ocular test seems to be the least to be depended on and the hypodermic method probably the most reliable. The cutaneous method is without doubt the simplest and the best adapted for the majority of patients unless they can have hospital super-

vision, when the subcutaneous method should be employed. The inunction of tuberculin has no advantages over the cutaneous method. In all doubtful cases tuberculin should certainly be used to help clear the diagnosis, as every means at our command may be needed before a definite conclusion can be reached.

CO-OPERATION IN MEDICINE.

BY BRYON F. BARKER, M. D., OF BATH.

(Read before the Innominate Club of Portland, 1911.)

Co-operation in business means more satisfactory transactions between buyer and seller. Co-operation in medicine means more satisfactory results to the family physician, to the consultant, and to the patient. So, in searching for a subject that might be of some slight interest to a club of such membership as this, I thought that the relation of these three, the family physician to the consultant, the consultant to the family physician, and that of both to the patient, worth a few minutes' consideration.

I assume that of the severer cases seen in our daily professional routine, a certain proportion will demand the aid of a co-operator to the physician first called, a consultant to the man really in charge of the patient. And in these pathological crises it is the family physician who ever has to withstand the brunt of the invasion of the hosts of death. He it is who comes to meet the first attack of the hostile horde, and he it is who must, at some time, decide whether or no he can fight it out alone, or had better summon reinforcements.

Communities of the same population differ greatly in the number of consultations held within their bounds. Some collections of people seem to have little faith in their local doctors to be aught but suggestors of specialists to attend their all, but the most, trivial complaints. Other territories of equal size and density of population are so jealously sure of their own doctor's abilities, that they will rarely have come to their borders a professional man from outside. But, in greater or less numbers, consultations are taking place among us all the time, and these consultations should, ideally and really, be for the benefit of all concerned in them.

The family physician, the practitioner on guard, will, if he is ever tirelessly wide awake, be the one to anticipate the wishes of the patient, or of the family, in the request for a consultation. He it is who knows his own capabilities and limitations, and so he it is who is best able to decide when to call for aid. But if from the patient's side, comes the first suggestion for another's opinion of the case, the man first called in has little right to take

offence. The patient is, after all, of the two, the most concerned with the outcome of the case and possesses the unanswerable privilege of calling in as many consultants as he pleases. Even if the family physician is satisfied that it is naught but the gratification of a fickle, selfish, useless whim, he should still strive amiably to further the patient's wishes, to continually coincide in his demands, with a smile. The practitioner who shows his jealousy by his irritability, will not likely be summoned first when this same whimsical patient is again taken sick. And, a consultation having been decided upon, the responsibility of the first attendant ceases not, but increases all the more. He should never be so cock sure of his opinions and deductions as not to review the case as if the subject were brand new, tracing up fragments of the history, that, at first, were of seeming unimportance, examining his patient again for any data desirable to present to the man who is coming in to help. I know that you men, as consultants, have time beyond time been handicapped in formulating an opinion of cases with any desirable rapidity, because of the lack of care displayed by the family physician, who was all too ready to drop his search for details when he found that help was to come to him from another source. So when a consultation is at hand, there is much for the family physician to do, many factors in the diagnosis to work out that are time destroying and, perhaps, life destroying, if left until the consultant's arrival.

Few obscure cases there are which are not better understood after a thorough urinary examination. Little excuse exists for the failure to be able to show the consultant some comprehensive chemical and microscopical data on urine. I have seen more than one case difficult of diagnosis between appendicitis, gall bladder disease and renal colic, made clear and unmistakable by the finding of abnormal blood, and, perhaps, some diagnostic crystals in the urinary sediment. A blood examination, if the case is at all one demanding it, should be ready at the consultant's arrival. At least the hemoglobin percentage and total leucocyte count should be made early, and, in addition, a differential count as well, if this, seemingly, would throw light into an obscure corner. An erythrocyte count is not so frequently of much value, and the strained film will usually show if the malady is primarily one of the blood itself, and so demanding the opinion of an expert along that line.

The passage of a tube on an empty stomach and again after a test meal, with appropriate analyses, are time consuming operations, that should not wait the consultant's advent. Differential diagnosis between consolidated lung and pleural effusion is usually readily made with the aspirating needle and need rarely wait for confirmation by the consultant.

If a diagnosis has been made by the attending physician, the consultant may ratify it, modify it, or entirely disagree with it. But before doing

any of the three, he will analyze every objective symptom, every subjective sign that has a bearing in the elimination of doubt. The two men will follow every clue leading to the truth like experienced detectives ferreting out a crime. In their conclusions they may not coincide. But, if they each have put their whole professional ability into the pursuit of truth, they will either honestly agree, or honestly differ. The consultant will not too lightly accept the family physician's conclusions for the sake of so pleasing his pride that he will be called by him again, nor will he stubbornly differ from him in order to gain prestige from the wavering patient. For, in the last analysis, it is the patient's welfare which is at stake, not that of either physician called to see him. If the consultant finds abundant reason to differ from the attending physician's deductions, he will lead him along by the paths his own mind has followed, to a better understanding of the case. He will point out to him wherein he wandered from the trail, and by what retracing of steps he may find it again. And if the first attendant sees himself clearly in the wrong, he will heartily welcome the co-operation of his fellow practitioner in showing him a more direct way to promote his patient's progress. Not infrequently, the case is one to most severely tax the mental acumen of both men at the bedside, and then it is that the patient himself, or his relatives, or friends, can co-operate towards a more correct understanding of the obscure malady.

A complete and correct history is frequently obtainable only by the most rigid direct and cross-examination, and the leading questions of one man will supplement those of the other in bringing out half forgotten or carelessly considered data that, in the final deduction, prove of so much importance.

And then, perhaps, after a second talk in the patient's ante-chamber, the attendant and the consultant may come to agree. Only then are their labors but partially accomplished. If the patient be an adult, and conscious, he will want to know what his prospects for recovery may be, and what line his advisers propose to pursue to make him well again. Right here must be evidenced that quality of character without which no physician ever attained a modicum of success—the spirit of optimism. No physician with a grouch ever aided by one step his patient's advance toward a cure. No other characteristic is so essential to the medical man's success as is this possession of optimism. Whether the disease is curable or fatal, whether the patient be a sense perceiving adult or an instinct receiving child, the optimism of his attendant plays no small part toward hastening his recovery, or prolonging his days if recovery is impossible. To the man of pure science, optimism may seem a worthless attribute; for it comes from the heart and not from the head. But, reaching out as it does toward castles on the far distant heights, appealing to hope more than to reason, cheering

wearied souls in tired bodies, it overlaps the realm of psychotherapy, that border-land in which the personality of the physician can accomplish so much. And that personality that can inspire faith, whether it be the personality of the obscure country practitioner or that of the brilliant city specialist, is a remedial agent more priceless than German drugs, more efficacious than American knives. Any man can master the elements of psychotherapy, but no man can practice them with success, without the requisite personality to instill them into the patient's unconsciously receptive mind. And without there be optimism in ourselves, we can never incite our patients to take up the arms they have tiredly thrown down, and advance again to the smoke and dust and sweat and blood of that battle they must fight for their very existence. Optimism, and the ability to inspire optimism in others, is the physician's most precious asset. Without it he can achieve nothing for himself, and less for his suffering fellow men. Having it in full measure, there is no limit to the pinnacles to which it will lead him. And with optimism will come its companionable ally, enthusiasm.

Optimism breeds enthusiasm, without which nothing worth while was ever accomplished. Enthusiasm made Alexander the Great the conqueror of the world at twenty-three, and made Napoleon's armies to change the map of Europe. It led the Duke of the Abruzzi to the tops of the Himalayas, and it drew Peary to the top of the world. It compelled Marconi to send his winged words straight through the fogs of the North Atlantic, and it urged the brothers Wright to make of the impalpable air a buoyant medium to sustain huge engines of practical propulsion. It impelled Louis Pasteur to carry along his investigations in the shelter of his laboratory, and it forced Dr. Grenfell to aid shattered bodies and broken spirits on the ice wracked shores of Labrador.

Optimism and enthusiasm ever stand side by side, the instigators of all worthy deeds. And these being part and parcel of the spirit of his medical advisers, how can the patient fail to co-operate with them in the battle with the shadowy forms from beyond the river! The three will present an unbroken front to the advancing hosts of darkness, and will often, and more often, hurl back the ghostly forms into utter rout. But if, as must so often happen, those inspired of optimism and enthusiasm must fall, still they will go down with colors flying and clarions blowing, and a smile of still trusting belief that all is well. And, with the optimism and enthusiasm of the patient's co-workers at the bedside, must be reckoned a third attribute, without which the other two are nothing but a sham, nothing but the mask worn at the play. And this third attribute of the trio is faith. Faith in their knowledge of the patient's disease, faith in their ability to do all in human power to withstand the inroads of that disease, must belong to the men who are watching over their patient's welfare. To have faith in them-

selves is the only way to inspire faith and confidence in those with whom they deal. And to these essential attributes of the true physician I would add one more, one that we can ill afford to cultivate too little. It is the old saving grace of humor. We must not take ourselves too seriously, not even the mightiest of us, for if we do, the occasions will arise when, to men as keen minded as ourselves, we will appear ridiculous. Not a day passes in the busy hurly burly of professional duty that plenty of humorous incidents do not arise, and these too, frequently, in the most trying cases. Sorry am I for the men who can not get honest fun out of their work. It is the surest preventive against tired brains and it is a certain prophylactic against hardening arteries, and all those direful symptoms to which sclerotic arteries lead. To make all work a relaxation, and an enjoyment, and a play, that is a successful professional life raised to its most ideal height. Among whatever class of people we are working, there is always the chance to see the fun of life, always the opportunity to study character.

With such opportunities as are ours, opportunities such as no other profession enjoys, to come into the secret recesses of men's lives, it is a cause for wonderment that so few physicians are writers of fiction. The material is always at hand. Probably those most capable of utilizing it are those too busy getting the fun out of their work to become dispensers of pure literary delectation. And so, with diverse attributes and differing methods, the consultant, the family physician, and the patient must work together. They must have faith in one another, and philosophy enough to believe that all things will come out right in the end if they will but put their utmost powers into the struggle against death and disease and misery. Co-operation will not always win. Well for us that it doesn't, else would we gradually relax our best efforts, and become effeminate dawdlers instead of vigilant combatants. One loses interest in the game when he knows it is a sure win. But optimism and enthusiasm and faith in the efficacy of hard work will never be disheartened at any turn in the tide of battle, will never be downcast in the very face of defeat. They are spiritual belongings that smile at all mortal woes, aeroplanes that lift us to the realms of higher things.

MEDICAL INSPECTION OF PUBLIC SCHOOLS.

BY D. E. DOLLOFF, M. D., OF BIDDEFORD.

(Read before the York County Medical Society.)

Mr. President and Gentlemen of the Society :

While Medical Inspection of Public Schools has been practiced in European and other foreign countries for years in a most thorough man-

ner, it is relatively new in this country, and in our state has not attracted the attention of the profession.

To all who are interested in this work I recommend the book of Dr. Gulick and Mr. Ayres, got out under the auspices of the Russel Sage Foundation, and which I shall quote extensively in this paper.

In this country two forces have been moving toward this work, Medical Science trying to protect the public, and Educational Science trying to perfect the individual. It seems that the two must combine to achieve the highest success.

The cause of the combination of forces is the changes in society which affect both the community and the activities and functions of the individual.

Less than 100 years ago the people of the cities were less than 4 per cent. of our population, now 33 per cent. live in cities. Then we were a rural community, now we are an urban community.

"This congestion of population has rendered necessary an attention by communities to sewerage, clean water supply, street cleaning, quarantine, purity of food and many other problems which in rural communities are important only to the family."

"At the same time a great and important change has taken place in our racial stock. These recent arrivals are bringing a style of living, a toleration of diet and vermin different from earlier American conditions and opposed to standards of life necessary to an enduring democracy." The six largest cities in the county have from 70 to 82 per cent. of foreign parentage.

At the same time, too, there has been a great development in our school systems. Then the schools kept a few weeks in the spring when the little ones went, and a few weeks in the winter when the big ones went. Going to school was but an incident in the child's life; now our schools are in session ten months in the year. Going to school is now the child's compulsory occupation for seven to ten years of his life. And in the mingling of children from all families is presented the most extensive means for the spread of contagious disease.

Boards of health have stopped the schools time and again before it was seen that they were permanent distributors of disease and required permanent and thorough medical inspection.

From the time of the Stone Age to the memory of men now living man's muscle did the bulk of the world's work. He sowed and reaped by hand, his shoes and clothing were made by hand. By hand he dug the canals and built the Pyramids and the wars were decided by hand to hand struggles. This has all changed, and the change is world wide and permanent.

The girls can no longer learn spinning and knitting and other rudiments of arts and crafts. The homes are changed in city and country.

Those rudiments of the dozen trades which the boy learned on the old farm are there no longer. It is the age of the "ready-made." The small garden is fast disappearing. The muscular work, once at the hand of children on reaching home, which strengthened the muscles and enlarged the chest, is largely gone.

Play is as important to the child's body as work. But when school attendance takes six hours a day and two to four hours study at home are needed, but little time is left for dolls or for the boy to wander through the woods.

There is little space for play. We have over 1000 children attending school in Biddeford, yet all the school yards together are not a half acre in extent. There is no other play-ground but the street, for the door yard is a thing of the past.

Our cities are being built without play-grounds. Here in Biddeford, Mayor Horgan made a strong attempt to secure one. But our children are not paying 25 per cent. dividends, and through lack of financial support he failed.

In larger cities, the condition is worse. In New York, south of 14th street, Dr. Gulick says only one child in ten has play room. Children do not play the games in the city as you and I used to play them in the old country school yards. The city is not suited to them, and children seem to know no games to play.

If any one thinks these conditions have no effect on the power to live let him read "The People of the Abyss," or some of the investigations made among the people of East London.

The true source of a healthy old age is health, preserved from a healthy childhood. Still teachers and parents have failed to see this. They have passed lightly over defects and generally held that children's diseases were a matter of course with a Chinese fatalism.

It has been recognized that in severe epidemics the parent had a right to insist that the school be a safe place to send his child, but beyond an occasional closing and rare fumigation, little was done.

Finally, through a tardy recognition of the notorious fact that the schools are a constant center for the swapping of contagious disease, there has been a securing of constant medical inspection, with the result that the infected are excluded and the schools are no longer closed for days or weeks at a time.

The school has taken little note of such defects of mind and body as would seriously affect the success of the child. All have been taken as equals and pushed from one grade to another.

While the work was easy all could keep up, but with closer grading, fuller courses and higher standards many were unable to keep up. We

heard of backward, retarded children. People began to wonder, to investigate the cause of this condition. Because of these inquiries, physical examinations were conducted by doctors connected with the schools. They found great numbers of children handicapped by defective eyesight, deafness, adenoids, swollen glands and decayed teeth.

And so communities are beginning to ask, not whether they can afford to have school inspection but whether they can afford not to. Teachers and parents begin to realize that the problem of the pupil with defective eyesight may be as serious from their viewpoint as that of the child with a contagious disease. Headaches, eye strain and failure follow all his efforts to study. Neither he nor his teacher knows what the trouble is, but he finds it impossible to keep up, he gets discouraged and falls behind in the unequal race and is well started on the road to an inefficient and despondent life.

The strength of the state depends on the strength of its individual members. The state certainly has the right to compel medical inspection, for if it has the right to compel a child to go to school it has the right to keep him from harm while he is there. Does the state have the right to compel the parent to correct defects? It would be hard to argue that it had no right to inform him of defects in his child or advise him to have them corrected.

In the Arsenal at Springfield, where the rifles are made for the army, all material is examined and every part is inspected and tested, so that the result is as perfect as the skill of man can produce and the result is reliable service. If our schools were to make the same attempt to turn out the best possible product for the service of the world, would not the same result follow? And would not the increased quality of product pay for the increased outlay?

Certainly it will be a long time before the methods so successfully used in some parts of our country will be used in all. But the movement is so closely connected with the welfare of the country, and is being pushed with so great energy by its advocates, that it is destined to be successful and to endure.

In the United States the first system was started in Boston in 1894. The Board of Health divided the schools in 50 districts and appointed 50 inspectors. New York followed in 1897, Philadelphia in 1898. In 1899, Connecticut passed a law requiring the teachers to test the eyesight of each pupil every fall and to notify parents of defects in writing. New Jersey followed in 1903 and Vermont in 1904.

In 1906 Massachusetts passed a law much like the Maine law, except that it is mandatory. The Maine law as we know was passed in 1909.

In the states of Utah, New York, California and Maine there are obligatory tests for sight and hearing.

In towns and small cities inspection for contagious diseases is simple. The teacher thinks one of her pupils has symptoms of some disease and notifies the principal; he notifies the school physician, who comes and examines the pupil and sends him home if needful. This system needs few cards or blanks. A card to the parent telling him what the child is excluded for and a monthly report by the physician telling how many he has examined or excluded and what for.

The most complete and organized system is that of New York. It is under the control of the Board of Health. It consists of a chief and a corps of doctors as medical inspectors, at a salary of \$100 per month, and a corps of nurses at a salary of \$75 per month. Objects and Rules by looking at Book.

They examine systematically and repeatedly for contagious diseases, exclude all affected by them, and see that the patient is isolated and the room disinfected. They exclude children of families in which contagious diseases exist. They also make a complete physical examination of each school child for physical defects and send a card to the parent advising treatment. They make an examination every morning in every school.

Let me show you some of the material used in Providence, R. I. Dr. Chapin, the chief inspector, says the work was started there by the teachers and parents of one school hiring a doctor themselves. He thinks now it would not be permitted to stop the work and that its most important part is in detecting non-contagious defects.

In Northampton, Mass., a small city, the work is in charge of Dr. J. G. Hanson, Medical School of Maine, 1898, who is developing the work on new lines.

In Harrisburg, Pa., the work is in charge of Dr. C. S. Rebuck, with two graduate nurses who have charge of about 10,000 children. He devotes "one to two hours a day to the work and the nurses do the clinical work and treat the skin diseases among the poor, etc."

The teachers' work in detecting contagious diseases is important. In some cities a list of general symptoms is furnished them and if a child shows some of these or otherwise looks sick they refer him to the inspector. Of course a physician cannot see every child every morning. The teacher, knowing the child's usual appearance, can quickly tell if anything is unusual.

The evidence of such men as Newmayer of Pennsylvania, Cronin of New York, and Harrington of Boston, shows that the school nurse is a success. In large cities, she is almost a necessity. Certain minor troubles, like pediculosis, even if excluded with a card to the parents, may go un-

attended through ignorance or carelessness. The child will stay out and infect playmates while the city pays for schooling he does not receive, and when he does return, he is way behind. The nurse tactfully shows the mother how to kill the vermin on the first visit and no time is lost. Or she may influence the family to send the patient to their family doctor for treatment. She helps to make the home co-operate with the school.

Inspection for contagious diseases is to protect the community. Examination for defects aims to secure a sound and strong individual.

Statistics show that $\frac{1}{4}$ to $\frac{1}{3}$ of school children have such bad eyesight as to need the services of an oculist if they are to do their work without permanent injury. About 5 per cent have defective hearing. Only a small part of these are known to the children, or to the teachers, or discovered by them without examination.

In Biddeford, the teachers found about 18 per cent. with short sightedness. They did not examine for farsightedness or astigmatism.

Of course it is of no use to find defects and report them to the parents unless they secure treatment, as the work will be wasted. It is hard to say just what proportion is treated. The per cent. varies with different people, and with the effort made to influence parents. However, it often happens that the ignorant new arrivals, when the thing is properly explained, are more willing to have something done, than the usually self-sufficient, but often equally ignorant "American."

In New York, it was found that treatment was necessary in 71 per cent. of cases and in Minneapolis 65 per cent. This doesn't mean that our schools are full of cripples and invalids. The defect may be no worse than a decaying tooth, and often is just that. Some say that 96 per cent. have defective teeth.

Records are important in the inspection for physical defects. There should be a record card for each pupil, with spaces for repeated examinations, and as the child is promoted the chart should follow him from room to room. As Dr. Gulick says, "It will do little good to have a record in the office of the principal, or the Board of Health, that Willie is stone-deaf in his right ear, if the teacher is ignorant of the fact and keeps him seated in the back left hand corner of the room."

So while examinations for contagious diseases may be in the hands of the Board of Health, this sort of work must be actively taken part in by the school authorities.

The room teachers test for vision and hearing in Maine, Massachusetts, and several other states. As to whether they are fit to do this opinions vary. If the teacher has had a little careful training there is less room for a difference. At the hearing before the Massachusetts Legislature, Drs. Blake, Walker and Knowles gave this opinion based on their professional

experience: "That school teachers, because of their acquaintance with the children and ability to find out what was in their minds, were more capable of making an examination of their hearing, than a doctor other than a specialist would be." The same opinion in regard to hearing was expressed by Dr. Miles Standish, who represented the Massachusetts Medical Society. Others say that any one who is competent to be a teacher is competent to make the examination.

The eye tests here and elsewhere are made by the Snellen chart at various distances, and the ear tests by voice and whisper at various distances. In some places the Astigmatic chart and Mattox rod are used.

Dr. Gulick says there are four classes of inspection in this country.

1. Examinations by teachers for physical defects generally of sight and hearing. The only expense is for material. Massachusetts appropriated \$1500 for the first year, with \$500 for each following year. With over half a million pupils, the expense is about 1/10 of one cent per pupil.

2. Examinations by doctors for detection of contagious diseases. This is the most common system and is inexpensive. In most cities the doctors call every day and look over such children as the teachers refer to them.

3. Examinations by doctors for contagious diseases and physical defects. This is the New York system and is largely employed in other places. It takes much time by a skillful man.

4. Examinations by teachers for vision and hearing, and by doctors for contagious diseases and other defects. This is the one prescribed in Massachusetts, and allowed in Maine. It not only uses the knowledge of the physician but enlists the interest and co-operation of the teachers.

The number of children per inspector varies from 1,000 to 10,000, the salary from \$200 to \$2400, and per capita cost in 24 cities varied from \$0.01 to \$1.22. The inspector's salary is not the total cost. There are incidentals, and in some cities there is a chief inspector and a corps of nurses. Also there is a wide difference in the extent of examination. So in this country there seems no basis for the fair pay of the school physician.

The small salaries so commonly paid make the importance of the work seem small and will not draw good men. We should heed Dr. Osler. "If we are to have school inspection, we should have good men and pay them well." And in England the salaries are much higher with much less work to do. The number of pupils per inspector must vary according to the extent of the inspection, as also should the salary.

Does it pay? There are no satisfactory figures. Any teacher who has been in the work knows of instances where it has paid well. Of course physical defects are only one cause of mental backwardness. Defective children may be unusually bright. It depends on the defect. The healthy child may be so fond of play as to neglect his work.

A retarded child is one which by his age should be, perhaps, in the eighth grade instead of in the fifth. He is that boy of our own age who was reading in the Fourth reader and "figuring" in fractions when we were in the Fifth and "cyphering" in cube root.

An examination under the auspices of the Russell Sage Foundation, to determine the cause of retardation of 20,000 children in New York City, showed 80 per cent. of the normal age for their grade to be defective, while only 75 per cent. of the retarded were defective. Also that the number of defectives in the older grades was less than that in the younger. The explanation is that children sometimes outgrow their defects.

But while this retarded one has been out-growing defects he has fallen behind, got discouraged, and left school, or arrived at the age when he had to leave work. The state has not had to pay extra for his education from the fifth to the eighth grade, but has a poorly educated citizen for the same money it pays for a well educated one.

Dr. Cronin found 90 per cent. of the children in the Truant School in New York City, defective. He took 87 tonsil and adenoid cases to be operated on in one day. Only these lost any time from school and many of them advanced three grades in the rest of the school year.

Our last Maine Legislature passed a Medical Inspection Act too long for this article, but which will be furnished by the State Superintendent of Schools to those who are interested. It provides for inspection of vision and hearing each year by the teachers, and allows a further examination by physicians for contagious diseases and physical defects if the town or city of less than 40,000 inhabitants votes an appropriation. It further provides for exclusion of those infected with contagious diseases, and for notification of parents.

It has been urged by some that the law is not strong enough, that it should compel cities and towns to make appropriations, etc. I believe that in the end it is better as it is. Certainly the effort to get a town meeting or City Council to appropriate money, will result in a better education and increased interest in this matter, that can only result in a real benefit to the work.

I found it harder to get figures and facts in this state than in far off New York, or Harrisburg. In Biddeford in 1909, the teachers examined 981 pupils. They found 5 per cent. defective in hearing, and 18 per cent. with defective vision. "Defective vision" in this state means short sightedness. In every case, parents were notified, but the per cent. getting treatment is not known.

In Saco they examined between 800 and 900, finding 11 per cent. defective in hearing and 23 per cent. defective in sight.



DR. BIGELOW THACHER SANBORN.

Dr. Bigelow Thacher Sanborn occupied many positions of eminence in medicine in Maine, being Superintendent of the Insane Asylum at Augusta, President of the State Medical Association, an expert witness often summoned by the Courts, and an alienist of high attainments.

He was the son of Warren Sanborn, of Standish, and born there July 17, 1838. He studied medicine, was graduated at the Medical School of Maine in 1866, and immediately received the appointment of Assistant Superintendent of the Asylum at Augusta. Before accepting this position he took a post-graduate course in various asylums in order to familiarize himself with the duties. He remained in this position until the death of Dr. Harlow in 1882, when he was appointed Superintendent, which office he capably occupied until his death, April 1, 1910. Under his administration the asylum flourished in benefits for the insane, the buildings were modernized and improved and a new one added and named after him.

He belonged to many medical and neurological societies and read before them many valuable papers concerning the insane. Amongst them may be

mentioned "Insanity in the Rural Districts," Care of the Feeble Minded" and "A Hospital for the Criminal Insane." In this last provision and in the improvement of those of feeble mind, Dr. Sanborn took great and untiring interest.

Personally he was an interesting, fluent and genial talker, smooth and agreeable, and in that way he obtained for the patients under his care all that he wanted from the state, yet he could on occasions be a man of great force of character in the presence of outbreaks of insanity.

He married in 1873, Miss Emma Martin of Portland, who predeceased him and left three children, one of them a physician.

J. A. S.



DR. GEORGE EDWIN BRICKETT.

Dr. George Edwin Brickett, of Augusta, the President of the Maine Medical Association in 1883, was born at White River Junction, Vermont, November 21, 1824, and died January 28, 1910, at the advanced age of 86, at his home in Augusta. He was one of the original members of the Association, and for several years the last survivor member. He was educated at the

Academies in Lancaster, New Hampshire and Limerick, Maine, and began the study of medicine under the care of that sterling physician, the late Dr. William Swasey, of Limerick. He was graduated at the Dartmouth Medical School in 1849.

He began practice at New Gloucester, and continued it at China until the civil war, when he served in succession as Assistant Surgeon and Surgeon in Chief of the Third, Fifth and Twenty-third Regiments of Maine Volunteer Infantry. In the middle of the war he was appointed to the full charge of a large military hospital, at Augusta, for the care of soldiers invalided home from the front. Finally at the end of the war he was appointed on a special mission to care for all the wounded and diseased Maine soldiers to be found in the camps and hospitals around Washington and to escort them safely home. This he did most satisfactorily, and received for his works the thanks of the state.

After five years thus occupied, Dr. Brickett opened an office in Augusta and practiced there the rest of his life, until retired by age.

As President of this Association he conducted the annual meeting with rapidity and decorum, and his address on that occasion was a model for others to follow. He wrote several papers for its various meetings, and in particular one "On Ten Amputations at the Thigh" and another "On the History of Ovariectomy in Maine," both of them terse and instructive surgical descriptions of cases seen in practice by himself. One of the legs thus amputated was so enormous as to weigh, when removed, more than all the rest of the trunk, arms, and remaining leg of the patient.

Dr. Brickett once attended a midwifery case; when, one child being born, he said to the bystanders that another was coming or he would attend the case for nothing at all. The second one making its appearance, he saw signs of a third and exclaimed, "I'll bet you a ten dollar bill that there is another." The third arriving, safe and sound, he handed over the money, to the pleased surprise of all concerned.

Dr. Brickett was twice married, and left a son who is also a practicing physician. In appearance, our former President was tall, very erect, of a swarthy complexion, and long straight black hair, so that one could have sworn that he was an original aborigine. He belonged to many societies, was in his prime a first rate surgeon, and remained whilst inside the bounds of youth, a capable and trustworthy practitioner of medicine. J. A. S.

DR. JOHN BEDFORD SHOBER.

Dr. John Bedford Shober of Philadelphia, as his home, and of Bar Harbor during the summer season, and a member of our Association in regular standing, died in Philadelphia April 27, 1911, after an operation as some assert for appendicitis, and as other sources report, for gall stones. I never had the pleasure of meeting this most genial surgeon, but it has been told me that he was a great gynecologist and occupied that position as consultant to the Bar Harbor Hospital, in which position he was considered as excelled by none. He was also one of the founders of the Hancock County Medical Society and took his share not only in entertaining royally its members, but in proving the value of his standing in the profession by his excellent special medical papers at its yearly meetings.

He was much interested in the meetings of our State Association and members will recall with pleasure his excellent paper, "On the early Diagnosis of Uterine Cancer," read in 1909.

Dr. Shober was an ideal host and entertainer and as a surgeon commanded the respect and attention of his colleagues. His advice in difficult cases was always at the service of younger men, to whom his death is a personal loss.

Dr. Shober belonged to many medical societies, far and wide; was one of those forceful men who soon get to the front rank. Obtaining his degree from the University of Pennsylvania in 1885, at the age of 24, he rose rapidly to fame and died at the early age of 51.

J. A. S.

DR. JOHN R. HALEY,

A member of the Association, died from a pistol shot wound, on Thursday, April 21, 1910. He studied at the public schools in Kennebunkport, then began with medicine, privately, and was graduated at the Maine Medical School in 1884. He practiced at Kennebunkport for four years and then removed to Kennebunk, where he continued the rest of his life. He had a very large and extensive country clientage, was a member of the York County Medical Society and many social and benefit societies.

J. A. S.

Editorial Comment.

Portland's Bacteriological Laboratory.

At the instigation of Dr. E. W. Gehring and through the earnest and enthusiastic support of the Portland Board of Health, a bacteriological department has, at last, been made possible as an all important adjuvant in the health work of that city. Too long have the citizens' health officials attempted the solution of their many problems with inadequate facilities for scientific work. In the light of modern knowledge regarding the transmission of infectious disease, the *modus operandi* of the past and the results obtained thereby, have been ridiculous. Such methods may answer passably well for small towns but cannot be tolerated in a city as large as Portland. In seeking laboratory aid for their various purposes, Drs. Webster and Haskell and Mr. H. T. Waterhouse, the Board's efficient lay member, have only done that which health officers in cities much smaller than our own, have found not only desirable but absolutely essential in the performance of their duties.

The present purposes of the laboratory may be briefly stated thus :

1. To render quickest possible assistance to all physicians in the diagnosis of typhoid fever, diphtheria, and tuberculosis, without additional expense to either patient or physician.
2. To examine bacteriologically all milk for sale in the Portland market, in order that the health authorities may the better direct their efforts toward the provision by the various dealers of a cleaner, more healthful supply.

With regard to the former of these objects it may be said that benefits will accrue to the public therefrom in proportion as the medical profession co-operates with the health board.

For the insurance of clean, wholesome milk the work done by both the inspectors and bacteriologist, under the supervision of the board, also needs the hearty endorsement of medical men.

It is the purpose of the authorities to secure samples of milk, from time to time, from all dealers without giving them previous warning, to subject such milks to rigid chemical, physical, and bacteriological tests, and to publish in the daily papers the results thereof, in order that all interested persons may know the quality of milk they are consuming.

This much is, however, a mere beginning. Neisser stains ought also to be made, and in the not distant future ice cream and butter must receive the same careful inspection as it is now proposed to give milk.

According to the present tentative arrangement, a culture station will

be established in different sections of the city and at the board of health office, at which physicians may at any time procure sputum bottles, diphtheria culture tubes, and typhoid outfits with full directions for their intelligent use. These may then be left with the bacteriologist, Dr. E. W. Gehring, in the Y. M. C. A. Building, until the completion of the city laboratory in the City Building.

The Journal takes this opportunity to compliment the present Board of Health for its efforts along lines of progress and urges upon the physician the desirability, necessity, and privilege of active, hearty co-operation.

Committee on Cancer.

At the meeting of the State Society in Augusta it was heartily voted to accept the recommendations of the Committee on Cancer, which was appointed at the meeting in Bar Harbor at the request of our late colleague, Dr. John B. Shober. Your committee, from statistics kindly furnished us by Dr. Young of Augusta, is convinced that the mortality from cancer in Maine is on the increase. This mortality is greater in ratio than the normal increase of the population of the state and undoubtedly has been minimized in the mortality records.

The enormous increase of OPERABLE cases, following the campaign instituted by Winter of Germany, applying for relief, is most gratifying, and demonstrates beyond question the amount of good that can follow intelligent enlightenment of the laity on this question. The victim of an inoperable malignant growth at once elicits our heartfelt sympathy; the fact that in many instances the case is INOPERABLE should cause us to regard the patient's medical adviser as more or less incompetent.

Your committee this year advised the following regime. The holding of a cancer symposium by each County Society during the coming year, a meeting held under the auspices of the County Society, to which lay persons are to be invited, the publishing during the year of articles on Cancer, the name of the writer to be withheld, in the daily press. It is hoped that County officers will do their part in this needed work and lend their support to a needed cause. Cancer has ceased to be a medical subject only; it is a national and world wide question of enormous import.

THE COMMITTEE ON CANCER,

F. H. JACKSON, Chairman.

Our President's Visit to the New Brunswick Medical Society.

The President attended the thirty-first Annual Meeting of the New Brunswick Medical Society at St. John, July 18th. The session continued through Wednesday and Thursday, and there were some seventy members present during the meeting, representing a large majority of the membership. The first day was given up to business, hearing reports of Committees, and the election of officers, with the reading of a few papers. One of the papers was read by Dr. John F. Thompson, of Portland, on "The Treatment of Ununited Fractures," and was well received and discussed. The evening was spent at a dinner given by the Society at a casino at the "Ben Lomond House," about twelve miles out of the city, to which the members drove in automobiles. Everybody had a good time, a fine ride through an interesting country, and there were no post-prandial speeches. Owing to engagements at home it was impossible for the President to remain for the session on Thursday, but judging from the program the papers assigned for reading were fully up to the requirements of modern medicine.

The Portland visitors were cordially received and entertained by the Society, and honored by an invitation to a dinner given by the President, Dr. Emery, at the Union Club, Wednesday noon, at which they met some twenty-five physicians of the city and vicinity. The President was impressed by the fine appearance of the members of the Society, many of them being of middle age, and all looked worthy to bear the honors and dignity of the profession.

Medical Inspection of Schools.

A subject which should be of intense interest to us all, is that of medical inspection of schools, concerning which we present an article in this number.

Although the Maine law providing for school inspection has been in force for over two years, comparatively few of our cities have taken advantage of the opportunity to adopt and enforce the system. Where it has been tried, it is still somewhat early to make any decided statement as to results, but we are informed that the governing school-boards in such progressive communities are very favorably impressed with the value of the work. We have yet to learn of any school board which, having once adopted medical inspection, discarded it as worthless, and this, in itself, would seem to be an argument in favor of the system.

Other articles on the subject will appear in subsequent issues, and we hope to be able to present some definite figures to show the value of school medical inspection as practiced in Maine cities.

R. B. M.

A Step in Advance.

The one greatest bulwark of support to the medical profession is a highly maintained standard of education in our medical colleges. In the past decade our medical schools have taken great strides forward and the future is full of promise; for example, the splendid schools maturing at St. Louis and New Orleans. There is, perforce, no one thing that will help more to maintain a high standard in our medical education than to raise the requirements for admission to our medical colleges by asking as a prerequisite a preliminary degree in arts or sciences.

The school which demands a full preliminary college degree must of necessity lose some and often many students. If not extensively endowed this loss will be felt, and to attempt it takes a courage that only few faculties have yet had. Many schools are approaching the ideal by asking one or two years of preliminary college training with especial emphasis on the scientific branches. A small college, dependent somewhat on tuition fees, which makes this as a requirement for admission, deserves much praise. It might indeed mean the gradual demise of the school, and it surely means that the faculty have got to keep busy to show these more broadly educated men that their school is worth while.

In the 1911-1912 announcement of the Medical School of Maine, a little paragraph in the middle of page 16 reads: "The Board of Trustees and Overseers of Bowdoin College, by recommendation of the Faculty, have voted that in and after 1912 one year of study in a reputable college will be required for admission to the Medical Department." The medical profession of Maine should stand behind the School in this move, remembering that the higher the grade of our Medical School the better the standing of each one of us in the community.

A glance through the complete catalogue of the School shows that Dr. Addison Thayer, the newly-appointed Dean and Professor of Medicine, has not been idle since June.

- We predict a promising future for the Medical School of Maine.

Co-operation of the Medical Profession.

However true the criticisms of the report of the Carnegie Foundation for the advancement of teaching might have been, the work has been productive of some little good. Furthermore, the reorganization of our State Medical Societies has certainly brought about a more harmonious feeling in the profession and a strong tendency toward united work. A most com-

mendable illustration of this can be seen in the report of the Committee on Consolidation of Medical Colleges of the Arkansas Medical Society. The object of this committee was to bring about the consolidation of the College of Physicians and Surgeons and of the Medical Department of the University of Arkansas. The faculty of both Schools have agreed to resign. This aims toward one large Medical School in Little Rock with sufficient room on the faculty for every practitioner of ability, together with a cessation of the discord now existent between the faculties of the two schools.

A few years ago it would have seemed impossible to have brought about a result of this kind, but now, we look upon it as but the natural result of our work done toward a higher standard in the medical education. It is an example that can well be followed in all of our states, not only in the Medical Schools, but in all Medical Institutions. A closer merging of all of our Medical Institutions can only have beneficial results to the profession and to the people.

No truly Medical Institution can successfully run without the co-operation of the medical profession and it is only necessary to unite upon common grounds and come to some understanding as to what will give the best results to all concerned. Let us all take an interest in our Medical Institutions; determine for ourselves in what ways they can be bettered; and unite upon common ground for improvements, then there can be no question as to the results.

Medical School of Maine.

The Medical Department Number of the Bowdoin College Bulletin has been issued and is now in the hands of the physicians throughout the state. Among the many changes recorded, none will seem more significant to the graduates of the School than the retirement of Alfred Mitchell, M. D., LL. D., of Brunswick, from the Deanship of the Faculty, and of Frederic Henry Gerrish, M. D., LL. D., of Portland, from the Professorship of Surgery.

Dr. Mitchell has been, for a long time, associated with the teaching staff of the School, and the many students who have matriculated under him, and received the benefit of his lectures, will learn with deep regret of his retirement from the chair of Internal Medicine and the Executive Office of the Faculty, but will hold in tender memory recollections of his teaching ability, his wise council during the student days and the matchless courtesy that characterized all his dealings with them. It is a pleasure to observe that, as Professor Emeritus of Internal Medicine, the School will

still have the benefit of his long experience and unfailing loyalty to its best interests. That Dr. Mitchell has won the respect and love of all men, is evidence unmistakable of a personality most charming and integrity unassailable, and a career most honorable and upright, and we bespeak for him, many years of satisfaction in contemplation of such a record.

Frederic Henry Gerrish, for many years Professor of Anatomy, and since the death of Dr. Stephen H. Weeks, Professor of Surgery, has also announced his retirement, but here again the teaching staff has the assurance of his continued assistance as Professor Emeritus of Surgery and Professor of Medical Ethics.

As scholar, teacher and writer, Dr. Gerrish has won an enviable reputation. His text book on anatomy places him in the foreground of American authors and his superb teaching in the same branch has been a source of great pride to the many students instructed by him. To have passed anatomy under Gerrish was the unlocking of the doors to medical advancement and to pass with high rank a distinction much coveted. Dr. Gerrish has been the recipient of many medical honors from state and national societies. As an authority in anatomy, as a master of perfect English, and as a matchless teacher, he has reflected great credit on the School. Medical education in Maine owes much to his progressive ideas, in the advancement of the preliminary requirements of education, in modern surgical technique and scientific medicine, and we wish him much pleasure in reviewing a life devoted to the improvement of the profession and toward the attainment of medical ideas.

H. E. M.

A GIFT.

Maine Medical Library acknowledges receipt of copy of the History of the Washington Medical Society, a personal gift of Dr. D. S. Lamb, Editor of the Washington Medical Annals. This certainly is a valuable volume, not only to the Washington Medical Society but to all Societies, who would do well to follow this example and have a complete history of their organization.

County News.

OXFORD.

HISTORY OF OXFORD COUNTY MEDICAL ASSOCIATION.

The Oxford County Medical Association was organized June 29, 1896. Credit is due Dr. George W. Hazelton of Littleton, N. Y., then of Norway, for bringing about the first meeting of the Association, as he sent notices to the physicians throughout the County to meet at Bryant's Pond on the above date. The following physicians were present: Drs. J. S. Sturtevant of Dixfield; C. D. Hill of Bethel; Horatio Woodbury of South Paris; J. F. DaCosta, C. M. Bisbee, J. W. Stuart, M. F. Ryan and Hiram Abbott of Rumford; A. L. Hersey and W. B. Haskell of Oxford; F. S. Packard of Waterford; W. D. Williamson of Gorham, N. H.; George W. Hazelton, F. N. Barker and H. L. Bartlett of Norway; F. H. Packard of West Paris; C. M. Cooledge of North Waterford; H. J. Binford of Mexico; E. H. Andrews of West Sumner and C. B. Rankin of Mechanic Falls. The temporary organization was Dr. Hiram Abbott Chairman and Dr. Hazelton Secretary. The chair appointed a committee to draft a constitution and by-laws, consisting of Drs. Hersey, Hill, Sturtevant, Rankin and Hazelton. The organization was completed by the election of Dr. Hill as President and Dr. Hazelton as Secretary.

Of those present at the first meeting six are now dead, namely, Drs. Hill, DaCosta, Woodbury, Hersey, Stuart and Ryan, and the following have ceased to be members: Drs. F. H. Packard of West Paris, F. S. Packard then of Waterford, Abbott of Rumford and Hazelton of Norway.

Since organization, sixty-nine different physicians have belonged to the Association. Of these sixty-nine, thirteen are now dead, several have been dropped for non-payment of dues, and many have resigned, some for lack of interest and others because of having moved from the county or state. Some changes in membership were caused by reorganization under the new plan of the American Medical Association.

The meetings of the Association are held four times a year, on the last Monday of March, June, September and December. The June meeting has always been set apart as Ladies' Night, and some man outside the county, a leader in the profession, has been secured as after dinner speaker. At the June meeting last year the Society was honored by an address by Dr. Morris H. Richardson of Boston, his subject being Gall-Bladder Surgery.

The meetings are all well attended, while the papers are good and discussions quite general. Regardless of poor railroad connections, the

average attendance at the three working meetings is about eighteen. There is a great deal of enthusiasm and interest displayed and the Society is in a flourishing condition.

B. F. BRADBURY.

WASHINGTON.

CALAIS, MAINE, August 15, 1911.

The Washington County Medical Society met in regular session in the City Rooms, Machias, Maine, Thursday, August 10, 1911, at ten o'clock.

The President, C. E. Johnson, M. D., Princeton, being unavoidably absent, the Vice-President, F. W. Snell, M. D., Dennysville, took the chair.

Minutes of previous meeting read and approved.

The first thing on the programme was a paper entitled "Clinical Remarks on Eye Injuries," by W. J. Gilbert, M. D., Calais. The paper was to be discussed by S. E. Webber, M. D., Calais, but he being absent, Dr. Frank Y. Gilbert, Portland, and others entered into the discussion.

A paper entitled "Therapy of Cardiac Lesions," by F. W. Snell, M. D., Dennysville, was next read, and discussion followed by A. L. Smith, M. D., Machias, Stanley P. Warren, M. D., Portland, President of the Maine Medical Association, and others.

On motion the Society adjourned for dinner, to meet again at one-thirty.

The paper entitled "606" by W. E. Gray, M. D., Milltown, N. B., was very interesting, and called up much discussion.

The next paper on the programme was "Three Suggestions for Good Obstetrics," by Stanley P. Warren, M. D., Portland. This paper was discussed by E. H. Bennet, M. D., Lubec, and others, they bringing out many important facts on that very important subject.

A paper on "Tuberculosis and the Treatment of Tubercular Arthritis in Children," by W. C. Peters, M. D., Bangor, was well received and discussed.

The programme being ended, Frank Y. Gilbert, M. D., Portland, Editor of the Journal of the Maine Medical Association, was called upon. He replied giving many important facts regarding the Journal, its progress, etc., and also of the Medical Library, which is being gotten together in Portland for the benefit of Maine physicians. He stated that physicians living outside Portland, could have the benefit of the Library provided they paid transportation charges on books to and from the Library.

G. L. Burritt, M. D., Harrington, whose application was favorably received by the Board of Censors, was made a member of the Washington County Medical Society.

Dr. Young, of Oak Bay, asked about membership certificates to the Society, and also to the Maine Medical Association. The Secretary was asked to have some printed and distributed to those members who are in need of same; also to have some reprints of the by-laws.

W. J. Gilbert, M. D., Calais, spoke of the number of malpractice suits in and through the state, and recommended that something be done regarding same. On his motion, which was seconded and carried, the chair appointed W. J. Gilbert, M. D., as a committee of one to confer with a like committee from other counties, to be appointed later, which would constitute a body to consider "Medical Charities and Liability Insurance in the State."

On motion, which was seconded and carried, the Secretary paid W. C. Peters, M. D., Bangor, for travelling expenses to and from Machias.

Before closing Stanley P. Warren, M. D., suggested to the Society that they do much in the way of "Case Reporting" at the meetings, as he thought that was a great way to study cases and to disseminate knowledge at such gatherings.

On motion, the meeting adjourned to meet again at the regular time in Calais in December.

W. N. MINER, *Secretary*.

PERSONAL NEWS AND NOTES.

Dr. Frank Mikelsky, of Bath, has been appointed a member of the staff of the New Jersey State Hospital and will take up his work there at once.

Dr. E. H. Bennet, of Lubec, was called out of the state on account of illness of his nephew, who is sick with typhoid fever. We are glad to report the convalescence of the patient.

Dr. Adam P. Leighton, Jr., of Portland, has gone abroad for a year's study and travel. While there he will spend some time at the Rotunda Hospital, Dublin.

Dr. A. H. Weeks, of Portland, has taken up his residence at 30 Deering St., Portland.

Dr. E. W. Gehring has moved to 40 Deering St., Portland.

The Internes at the Maine General Hospital for the following year are Drs. Jackson, Baldwin and Lazarus.

The Internes at the Maine Eye and Ear Infirmary for the following year are Drs. Sullivan and Bicknell.

Dr. Searle, formerly Superintendent of the Maine Eye and Ear Infirmary, is at Robinston for the summer.

Dr. M. C. Webber, who has completed his year's work as Interne at the Maine Eye and Ear Infirmary, has opened an office on Congress St., Portland.

Dr. J. O. Chenevert, of Biddeford, is soon to leave this city and engage in practice in Lawrence, Mass.

Dr. Youland, a graduate of McGill in the class of 1910 and a late interne of Bellevue, has accepted the position of interne at the Webber Hospital, Biddeford.

It is expected that the Webber Hospital, Biddeford, will have its opening in October.

George W. Bailey, M. D., of Philadelphia, President of the World's Sunday School Association, who spends his summers at his cottage at Lake Cobbosecontee, is ill at St. Barnabas Hospital.

Dr. John Ridlon, of Chicago, Ill., has been visiting the Children's Hospital, Portland.

Dr. Haney has moved from 528 Deering Ave., to 545 Deering Ave., the house formerly occupied by Dr. Mitchell.

Dr. Charles Cook, of Natick, Mass., is a guest in town for a few days. Dr. Cook is a member of the Massachusetts Board of Medical Registration and very active along lines of advanced work in the Medical Profession.

Board of Medical Registration.

Those who passed the examinations were: Drs. E. I. Alley, Crow Creek, S. D.; Albert K. Baldwin, Portland; Francis P. Boyd, Brockton, Mass.; Arey Alonzo Butterfield, Danforth; James D. Clement, Belfast; Charles A. Eaton, Brockton, Mass.; DeLorme Fordyce, Gloucester, N. J.; Fred H. Freeman, Bangor; Nathaniel Gildersleeve, Bar Harbor; William L. Gousse, Fairfield; Morgan E. Griffith, Atlantic City, N. J.; Francis C. Harris, Philadelphia; Everett Clifton Higgins, Clinton, N. J.; W. J. Hudson, Atlantic City, N. J.; John McDonald, New York City; Allston F. Hunt, Portland; Elmer H. Jackson, Jefferson; Nathan L. Jacobson, Newark, N. J.; Charles M. Judkins, Lynn, Mass.; Peter Kane, Brooklyn, N. Y.; Ralph N. Knowles, Hebron; Charles Colby Knowlton, Ellsworth; Oram Robert Lawry, Winter Hill; Ralph F. Lockwood, Lakewood, R. I.; Robert L. Maybury, Saco; William H. Miller, Boston; Fontaine Bruce Moore, Philadelphia; Lubert Blair Morrison, Boston; Charles J. Mason,

Hampden; Hamilton C. Perkins, Madbury, N. H.; Franklin Pierce Pyles, Philadelphia; Willard Leslie Quennell, Roxbury, Mass.; Harry L. Shapleigh, Somerville, Mass.; Katherine J. T. Slattery, Boston, Mass.; Earle Moulton Smith, Fitchburg, Mass.; Rufus Edwin Stetson, Damariscotta; Carl Hervey Stevens, Northport; Roland Lesley Toppan, Newburyport, Mass.; Edwin C. Town, Narbeth, Pa.; Francis Howe Webster, Bucksport; Charles Moore Wilson, Waterford; Edwin Theodore Wyman, Lubec.

Correspondence.

"SUCCESSFUL MEDICINE."

To the Editor of the Journal, Maine Medical Association:

With your kind indulgence I want to bring an important message to your readers. I am going to alternate "Physiologic Therapeutics" with "another new journal," which will carry the very attractive title "Successful Medicine." I believe that many of your readers will welcome this new journal, as it is to be a journal of *commercial medicine*, devoted solely to that side of practice which directly concerns the dollars and cents, published with the main idea of making its readers better-paid men than the brick layers or other skilled laborers who gain their skill with practically no cost, and who earn more than many doctors.

The financial side of practice is mighty important. They talk about the "science of medicine" or the "art of medicine," but, if I am not badly mistaken, the dollars-and-cents side of medicine has been too lightly considered. Not, mind you, that the scientific and altruistic side of the doctor's work is depreciated. Far from it. Medicine to-day is filled with honest, scientific workers, and with men always ready to help the under-dog when opportunity affords; but think of an average of \$700 a year as the income of the average American physician. Remember, too, that medicine unfortunately takes no note of the eight-hour law.

"Successful Medicine" will deal with the problems of the physician in his office, and especially with those which concern the business of getting results *and the money for it*. It will be published bi-monthly, beginning in September. It will be a regular magazine size, with a minimum of 48 pages, and the price will be only twenty-five cents a year! Since this journal will be devoted to commercial medicine, surely every reader of the Journal Maine Medical Association will be interested. How many will subscribe in advance of publication?

Cordially yours,

60 W. Randolph St., Chicago.

HENRY R. HARROWER.

Book Reviews.

Hieronymus Fracastor's Syphilis. From the original Latin. A Translation in prose of Fracastor's immortal poem. Printed on hand-made imported paper; Library binding. Crown Octavo. The Philmar Company, Medical Publishers, Fidelity Building, St. Louis, Mo. Price \$2.00.

This poem, originally published at Venice in 1530, is remarkable not only for its historical interest, but also for its accuracy in the description of the clinical symptoms of the disease. The rounded cadences of the Latin hexameter are sacrificed for the sake of literal translation, but the poetical beauty of the original shows itself very plainly, especially in the mythological allusions. While many of the minute directions for the treatment of the disease may bring a smile to the lips of the modern reader, it is evident that the author was a man of keen observation and perception. Indeed, he used mercury as the basis of one of his treatments, and describes its effects as marvelous. The book cannot fail to be of interest to one who would read of the past.

R. B. M.

Manual of Clinical Pathology for the General Medical Practitioner, comprising the Examination of Urine, Stomach Contents, Fæces, Blood, and the Serum Diagnosis of Syphilis, Tuberculosis, Typhoid Fever, &c., by Richard Weiss, M. A., Ph. D., F. C. S., in collaboration with George Herschell, M. D. London: Andrew Charles, F. R. C. S., Dublin. Price 2/-Net. London, J. & A. Churchill, 7 Great Marlborough Street. 1910.

This handy and useful pamphlet is the second edition of a work which appeared first in 1908 under the title of "Newer Methods for the Qualitative and Quantitative Analysis of Urine and Gastric Juice." As seen by the title, the scope has been much enlarged so as to include practically all of the important clinical tests employed by the general practitioner. It presents in a concise and accurate manner the various tests and methods of clinical diagnosis and shows the fallacies to be avoided. The value of the manual is greatly enhanced by brief discussions of the clinical significance of the various tests. We agree heartily with the author in his recommendation of the instrument of Professor Sahli as the most reliable and accurate means of estimating the hæmoglobin content of the blood.

P. P. T.

New and Non-official Remedies, 1911; containing descriptions of the articles which have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association, prior to January 1, 1911. Chicago: Press of the American Medical Association, 1911.

This book is a sign of the times. Modern industrial enterprise, after a long reign of almost irrational development, is everywhere submitting to some form of authoritative regulation and control. In the manufacture and sale of medicines, the need of official restraint has been frankly recognized, and divers checks have been devised to defeat deceptive exploitation and protect the public health. That many products of the great manufacturing chemists of our day possess extraordinary therapeutic value, has, of course, always been beyond dispute; the only difficulty is to winnow the chaff from the wheat. The purpose aimed at more loosely and in a larger field by the Pure Food and Drugs Act of 1906, is scientifically pursued in this highly important, though unpretentious publication.

In February, 1905, the American Medical Association appointed a Council of Pharmacy and Chemistry to gather and diffuse such information as should protect the profession in the prescription of proprietary medicinal articles. By "proprietary article" the Council understands any chemical, drug, or similar preparation used in the treatment of disease, if such article is protected against free competition as to name, product, composition, or process of manufacture, by secrecy, patent, copyright, or in any other manner whatsoever. To prevent fraud, undesirable secrecy and the abuses of advertising, the Council has drawn up a definite and concise code of rules. Articles on the market are examined by the Council, and such as appear to conform to the code are admitted to the list and their essential features described in the present book. Under each substance are given its composition, its actions, uses, and dosage, and the names of its manufacturers. Articles which are official in the United States Pharmacopeia or in the National Formulary naturally do not need the approval of the Council, and hence fall outside the scope of the book work.

To insure acceptance by the Council, the composition of every article must be presented for publication; and suitable tests for determining the composition must also be applied. The Code excludes all useless and unscientific articles and such as bear fraudulent statements as to source and preparation, or advance unwarranted therapeutic claims. No article is admitted that is advertised directly to the public, or indirectly by therapeutically suggestive names or by the explicit mention in accompanying circulars of diseases in whose treatment it is to be used. "Poisonous" or "potent" substances in the product; and trade names not sufficiently descriptive of the chemical composition or pharmaceutical character of the article, or

otherwise unsatisfactory, are reinforced by truly descriptive titles in the book.

The Council has been careful to promise that the acceptance of an article for the "New and Non-official Remedies" is not an indorsement, nor does its presence in the list imply a recommendation; it has at most a negative value, and means that in the article the Council has found no conflict with its rules.

It is proposed to issue the book annually; from time to time further medicinal substances accepted by the Council will be published in the Journal of the American Medical Association, and later embodied in supplements to the book.

It is perhaps, to be regretted that the evidence on which the descriptions are based does not depend wholly on investigations conducted by the Council, but has of necessity been supplied in part by the manufacturers or their agents. In the present stage of the Council's organization and equipment, such an ideal is too perfect for realization. Criticisms and corrections are, however, cordially requested for the periodical revisions, and it is not too much to hope that the work of the Council may progress so far in thoroughness and scientific precision that eventually the interested and ex-parte statements of promoters may be eliminated altogether. L. A. D.

Studies from the Rockefeller Institute for Medical Research.

The published results of investigations conducted in the laboratories of the Institute, or under its grants, are assembled at irregular intervals and bound into volumes designated *Studies from the Rockefeller Institute for Medical Research*. A small number of the *Studies* are distributed free of charge to libraries, learned societies, and laboratories in which medical research is carried on. A few copies are reserved for sale, and may be obtained at \$5.00 each.

For further information concerning the above publication application should be made to the

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VOL. I./

OCTOBER, 1911.

NO. 10.

Original Articles.

LESIONS OF THE PNEUMOGASTRIC NERVE.

BY CHAUNCEY R. BURR, M. D., OF PORTLAND.

Of all the cranial nerves, none is more important than the pneumogastric. It might almost be called the "thread of life," for if it is cut, the vital functions become embarrassed and soon cease. The reason for this is apparent if we consider the distribution of the pneumogastric.

Arising from a nucleus in the floor of the fourth ventricle, and passing downward through the neck in the fibrous sheath which contains the common carotid artery and the internal jugular vein, it enters the thorax.

Here the course of the two nerves differs somewhat on the two sides, but in general both follow the trachea to the roots of the lungs, and from thence onwards, wind about the œsophagus to the stomach. The left pneumogastric supplies the front of that organ, and anastomoses with branches from the right pneumogastric and from those of the gastric and hepatic plexuses. The right pneumogastric supplies the back of the stomach and terminates in the solar, splenic and left renal plexuses.

These and certain branches which connect it with other nerves, viz: the spinal accessory, the glosso-pharyngeal, the facial, the hypoglossal and the first two cervical nerves, often through the medium of a gland of the sympathetic system, may be called the branches of communication; while

the branches of distribution are limited to such filaments as end in the dura mater, the skin on the back part of the pinna, the pharynx, larynx, lungs, heart, pericardium, œsophagus, and stomach.

The pneumogastric nerves convey motor fibres to the voluntary muscles of the soft palate (with the exception of the tensor palati), pharynx, larynx, the musculature of the œsophagus, stomach, small intestine and colon (with the exception of the rectum), and to that of the air passages (trachea, bronchi and bronchioles). It also supplies the heart with motor fibres (inhibitory and depressor).

Sensory fibres are furnished to the dura mater, external ear, pharynx, larynx, œsophagus, stomach, air passages and pericardium.

The pneumogastric also conveys fibres either directly or through the solar plexus and its offsets to the liver, gall bladder, pancreas, spleen, kidneys and suprarenal bodies. They are probably vaso-motor in function. Through its connections with the glosso-pharyngeal nerve, it exerts a certain amount of influence upon all the structures to which the latter is distributed, viz: the meninges, soft palate, mastoid cells, Eustachian tube, pharynx, and posterior third of the dorsum of the tongue.

Through its connection with the facial nerve it controls to some extent the movements of the occipitalis muscle and the tonicity of the muscles which keep the ear close to the head. Through its connection with the hypoglossal nerve it has some motor influence upon the extrinsic and intrinsic muscles of the tongue. Through its connection with the connecting loop between the first and second cervical nerves it influences the tonicity of the deep muscles on the back of the neck and the skin over them.

From this survey of the distribution and connections of the pneumogastric nerve it is evident that widespread disturbance of the bodily functions will attend its disease or injury.

If both vagi are divided below the jugular ganglion there is dyspnœa and hoarseness; the lungs become engorged and consolidated and it may be hæmorrhagic; the heart passes into a state of fatty degeneration if the individual survives long enough, and the pulse becomes accelerated and often irregular; swallowing is difficult; the liver loses its power of changing sugar into glycogen; the musculature of the stomach becomes paralytic and the organ dilates, while the secretion of gastric juice ceases altogether; and there is atonic constipation. If only one vagus is divided the symptoms are less in degree but the same in kind.

Suppose, however, that in place of being destroyed, the functions of these nerves are impaired—it may be by pressure or disease—what would be the symptom complex? For answer the following picture may be drawn: Hoarseness, dyspnœa, pulmonary congestion, feeble cardiac action, an atonic and dilated stomach, feeble digestion, coated tongue, a relaxed

and œdematous soft palate and uvula, catarrh, deafness, emaciated neck, particularly the back muscles, prominent and wasted ears and thinned and silky hair on the posterior portion of the scalp.

The lungs, heart, stomach, intestines and liver, to which the pneumogastric is directly distributed, have a double nerve supply, viz: the cranial and the sympathetic.

The part which each plays in innervating these organs is not clearly defined, but enough is known to say that the sympathetic is the ordinary medium through which the movements of the muscles of the vascular system, the muscles of the viscera, and the secretions of gland cells are controlled, quite apart from the emotions or the will.

It seems to be the rule that stimulation of the sympathetic results in orderly and rather slow movements; while stimulation of the pneumogastric results in disorderly and convulsive movements. When the two are in direct communication, as in the case of the solar plexus and its offsets, stimulation of the pneumogastric will result in increased peristalsis and secretion, but if the latter is paralyzed or partly so, these functions are lost or diminished. Indeed, the whole system of sympathetic ganglia seems to act as a transformer for co-ordinating motor impulses received through the cerebro-spinal system.

Conversely reflexes can occur through the sympathetic in communication with the pneumogastric, or through the sensory fibres of the latter. Some of these reflexes are very puzzling unless the mechanism by which they are produced is understood. Thus tachycardia may be due to a chronically inflamed pylorus and no relief obtained until this is treated. Or again, an irregular and intermittent pulse may be caused by cholecystitis. In such a case digitalis will only aggravate the symptom.

Asthma may be described as a neurosis of the pulmonary branches of the pneumogastric nerve, the essential symptom of which is a spasmodic contraction of the bronchial muscles. The causative factors in producing an attack are climatic conditions, odors, dust, gouty, rheumatic, and syphilitic intoxications and peripheral irritations. These latter may arise from the nose, stomach, small intestine, rectum and genital organs, and are, of course, reflex in character. Peripheral irritations of the pneumogastric nerve may also cure asthma. I recall a case in which the attacks had recurred nightly for a period of three weeks, and which was cured immediately and permanently so soon as an acute gastritis developed.

Spasm of the arteries is often, I venture to think, a gastro-intestinal reflex quite as common as arterio-sclerosis, with which it is often confused. In both conditions there is an increased blood pressure. Spasm of the arteries, however, yields to measures other than vaso-dilators, though it will yield to these also. Thus I have seen a blood pressure of 190 m.m. in a

case of chronic gastritis drop to 135 m.m. after the gastritis had been treated. Such would not be the result in arterio-sclerosis.

A picture has already been drawn of what happens when the function of the vagus is impaired. If this picture is studied, it will be found to bear a remarkable resemblance to a case of pulmonary tuberculosis. In fact, if time permitted, enough evidence could be produced to show that in all probability the first stage of phthisis—"the pretubercular stage" as it has been called—is nothing more nor less than a pneumogastric neuritis; that the tissues to which the pneumogastric is distributed, including the lungs, are partly paralyzed, and that it is owing to this partial paralysis that the tubercle bacillus is enabled to find a lodgement and to grow.

One of the results of pneumogastric neuritis is a gastropnoia or general splanchnopnoia. The prolapse of the abdominal viscera pulls upon the thorax and prevents this from properly expanding. The phthisical chest is thus produced and the way prepared for the advent of the tubercle bacillus.

The functions of the vagus can be impaired in various ways, which may be grouped as follows:

First. Specific intoxications, as alcohol, syphilis, and serpent venoms.

Second. Acute infectious diseases, as typhoid, diphtheria, whooping cough, influenza, cerebro-spinal meningitis, multiple neuritis, beri-beri and diabetes.

Third. Definite pathological lesions of the cerebro-spinal system, as locomotor ataxia, multiple sclerosis, bulbar paralysis, Landry's paralysis, tumors of the pons or medulla and enlarged mediastinal glands. Any one of these factors may cause an impairment of the functions of the pneumogastric and thus be an indirect cause of pulmonary tuberculosis.

I shall now consider these groups a little more in detail.

The first specific intoxication mentioned is alcohol. Alcoholic neuritis is characterized at first by numbness, tingling and hyperæsthesia in the extremities, including exaggerated knee-jerks; later by anæsthesia, paralysis of motion, loss of knee-jerks, quickened pulse, dyspnœa and pulmonary embarrassment. The *post mortem* findings, apart from those in the stomach, liver and kidneys, are mostly confined to the oblongata, where so many nuclei of the cranial nerves are situated; the posterior column of the spinal cord and the peripheral nerves. These changes are hyperæmic or sclerotic in character.

Of the peripheral nerves, although any may be attacked, those of election seems to be the radial, anterior tibial, peroneal and pneumogastric.

Pulmonary tuberculosis and pneumonia are well known to be the special shadows which pursue the drunkard. The fact that the vagus is often found inflamed at necropsy in cases of alcoholic neuritis explains this.

Syphilis in its tertiary manifestations is well known to attack nerve tissue. At first there is pain, hyperæsthesia, and spasm, later, anæsthesia and paralysis. The virus seems to have a predilection for the cranial nerves, including the pneumogastric. But the cord and spinal nerves are often degenerated as well. At necropsy the oblongata and its nuclei are specially apt to be diseased. This, of course, affects the vagus nerve also.

Of late years a good deal of attention has been paid to the effect of serpent-venoms upon both men and animals.

Dr. A. J. Wall, under the auspices of the British Government, has made an exhaustive study of the snakes of India and the symptoms which their bites induce. He found that, without exception, the medulla oblongata, its centres and issuing nerves, were the structures which bore the brunt of the attack, while with certain venoms, hæmolysis and bloody fluxes were also present. Death usually comes through convulsions and paralysis of respiration, the respiratory centre being paralyzed before the convulsive centre. The bite of the daboia snake, which belongs to the viper family, seems to be the most deadly, and is frequently followed by hæmolysis and bloody diarrhœa. Cobra venom paralyzes the respiratory centre very quickly. The following case illustrates this:

Buckland, in his "Curiosities of Natural History," relates how, having skinned a rat which had been killed by a cobra-bite, one of his fingers at the time having an abrasion on it, he felt shortly afterwards "just as if somebody had come behind me and struck me a severe blow on the head and neck, and at the same time I experienced a most acute pain and sense of oppression in the chest, as through a hot iron had been run in and a hundred weight put on top of it."

Rattlesnake venom is much less poisonous than either cobra or daboia venom.

Wall gives the following symptoms of poisoning by cobra venom, which are characteristic also of rattlesnake poisoning, though different in degree, to wit: A feeling of intoxication, drooping of eyelids, loss of power in legs and arms, staggering gait, inability to walk or stand without support, profuse salivation, paralysis of tongue and larynx, embarrassed breathing, inability to swallow, general paralysis, twitching in limbs, lessening of respiration, arrest of breathing and heart failure.

Wall further points out the resemblance between cobra poisoning and glosso-laryngeal paralysis and shows that in both conditions the roots of the pneumogastric, spinal accessory and hypoglossal nerves are the structures specifically affected.

The second group of pneumogastric irritants includes certain acute infectious diseases.

The nervous phenomena of typhoid fever are well known. Besides

the muttering delirium and fibrillary twitchings, there may be aphasia, temporary hemiplegia, hyperæsthesia, neuralgia and paralysis of various nerves.

The frequency of typhoid pneumonia and of *post* typhoid pulmonary tuberculosis should be compared with Lewin's finding (Beitrag zur Pathologie der N. Vagus, 1888) that in twenty-six cases of typhoid the vagus was degenerated in every instance.

Diphtheritic paralysis is well known. Beginning as a rule in the pharynx and larynx, it may extend to the ocular muscles, to those of both upper and lower extremities, the bladder, abdominal muscles, heart and lungs.

Mays, to whose work on "Consumption, Pneumonia and their Allies" I am indebted for much in this paper, gives a large number of necropsies in cases of diphtheria, from which it appears that the pneumogastric is specially liable to inflammation. The *post mortem* changes varied from hyperæmia to intense fatty degeneration.

Whooping-cough is believed by many to be due to irritation of the pneumogastric nerve by a specific poison.

The same is true of influenza, although in addition there is congestion of the meninges of the brain and spinal cord. The organs to which the pneumogastric is distributed, and in particular the lungs, heart and intestines, are those specially disordered.

Then there is cerebro-spinal meningitis. This disease does not attack the pneumogastric specifically, but rather inflames the whole cerebellum, pons, and oblongata, the meninges over them and the cranial nerves which have their origin in the oblongata. The spinal cord is often involved in the inflammation. Thus the pneumogastric is liable to be attacked in this disease along with other nerves.

Multiple neuritis, on the contrary, rarely attacks the brain or spinal cord, but as its name implies is concerned mainly with peripheral nerves. Of these, those distributed to the lower extremities are more affected than those distributed to the upper extremities. The vagus is specially apt to be involved, as is shown by rapid pulse, disturbances of respiration, etc.

Beri-beri is a variety of multiple neuritis endemic in certain parts of the world, as India, Japan, the Philippines, etc. Its symptoms include fever, paraplegia, palpitation, dyspnœa, effusion into the large serous cavities, and catarrh of the bronchi, stomach and intestines. Upon *post mortem* the peripheral nerves, heart, lungs and serous sacs are found to be the structures principally affected. This disease is not, as a rule, fatal unless the pneumogastric or phrenic nerves are involved, an event which sometimes occurs.

Diabetes is frequently associated with pneumogastric neuritis, but whether as cause or effect is not at present known. It will be remembered that one effect of section of the pneumogastric was the loss of the glycogenic

power of the liver, i. e., the liver stopped changing sugar into glycogen. Under such conditions sugar would pass directly from the alimentary tract into the blood and a condition of diabetes be induced. But as there are many cases of pneumogastric neuritis which are not associated with diabetes, it is evident that the nervous factor cannot be the sole cause.

Pulmonary tuberculosis is so frequently associated with diabetes, that it may almost be considered the natural ending of the disease. Its relation to pneumogastric insufficiency has been already explained.

The third group of pneumogastric irritants comprises definite pathological lesions which have already been named, viz: locomotor ataxia, multiple sclerosis, bulbar paralysis, Landry's paralysis, tumors of the pons or medulla and enlarged mediastinal glands.

Locomotor ataxia, while principally confined to a sclerosis of the posterior columns of the spinal cord, has a tendency to invade the oblongata and the nuclei of the spinal accessory and vagus. Hence arise the laryngeal, bronchial and gastric crises.

Multiple sclerosis, bulbar paralysis, Landry's paralysis, and tumors of the pons or medulla, may one and all invade the medulla and its nuclei and thus produce paralysis of the pneumogastric. As to enlarged mediastinal glands from whatever cause, they may involve and compress the pneumogastric sufficiently to interfere with its functions. The treatment of pneumogastric lesions will, of course, vary according to the cause. Where there is an acute neuritis, rest in bed is indicated. Flannel wrung out in hot water and applied to the neck over the pneumogastrics is of value. The effect is enhanced if the pack is covered in with oiled silk or rubber tissue. The diet should be of the simplest and small in amount. It is probably not without reason that so many cases of sudden death occur at or just after a meal. The digestive process makes heavy demands upon the pneumogastric, which if inflamed it may not be able to respond to.

Of drugs there are a few which are applicable to this condition. Atropin is believed to act specifically on the vagus and may be used as such or in the form of belladonna. It is sometimes useful to combine the tincture of belladonna with the tincture of iodine, but as the latter is irritating the officinal tincture should be largely diluted before being used.

Mays has recently called attention to rattlesnake venom as a therapeutic agent. The idea is not original with him, as serpent venoms in general have been used for many years by homeopaths. Rattlesnake venom or "Crotalin," it will be remembered, paralyzes the pneumogastric, spinal accessory and hypoglossal nerves; this, of course, in substantial doses. In minute doses it would probably stimulate these nerves. Its quieting effect is used in cough, profuse expectoration, hemoptysis, asthma, and pain in the larynx. Its stimulating effect in hoarseness, weak voice, diffi-

culty in swallowing and failure of respiration in pneumonia. It is also used in neuralgia or myalgia in any part of the body, and in epilepsy and multiple sclerosis. The dose varies from $1/100$ to $1/200$ of a grain hypodermically once a week in the chronic cases; and 10 minims of a $1/50$ of a grain solution every three hours for five doses, in pneumonia.

Chronic neuritis would require massage and the use of the iodides in some form. Counter-irritation might be tried, as fly blisters along the course of the nerve, galvanism and faradism.

Mays injects a solution of nitrate of silver over the sheath of the nerve, using from four to seven minims of a two and one-half per cent. solution, and sometimes five minims of a five per cent. solution. The procedure causes considerable pain, and to obviate this he first injects five minims of a two and one-half per cent. solution of cocaine hydrochlorate.

In cases of gastropotosis and splanchnoptosis the vagus is probably more or less atrophied by the constant traction to which it is subjected. Here the indications are for abdominal massage and support such as is given by a Rose bandage.

It is most curious and instructive to see the way in which the long, phthisical-looking chest peculiar to these cases will broaden and expand as the splanchnoptosis is relieved.

OPHTHALMIA NEONATORUM.

BY ALBION H. LITTLE, M. D., OF PORTLAND.

(Read before the 59th Annual Session of the Maine Medical Association at Augusta, June, 1911.)

Ophthalmia neonatorum has been taken for a subject of this paper, not only on account of its apparently increased frequency, but because of its frequency. It is one of the diseases that can be practically obliterated by preventive medicine. Its prevalence is circumstantial evidence of remissness on the part of obstetricians in not using prophylactic measures which are harmless, easily used, and effectively prevent this disease which is so fatal to the eye.

As to the frequency of ophthalmia neonatorum, the records of the Maine Eye and Ear Infirmary for the past ten years show a steady increase from the occasional case which was treated in the isolation building to the many cases which now demand a ward in the Infirmary itself: From 1900 to 1905 there was a yearly average of 7 cases, but from that time this number has increased until it reached 30 cases in 1910. From the 400 obstetrical cases reported to the City Clerk of Portland for 1910, by the

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10 leading obstetricians, there were 10 cases of ophthalmia, an average of two and one-half per cent.

Ophthalmia neonatorum may be made to include the purulent or mucopurulent inflammations of the conjunctiva which occur during the first year after birth, but ordinarily it is applied to those inflammations which appear before the end of the first month after birth.

Although this disease was known to the early Greeks and Arabians, its origin was assigned to vague sources, such as to the bad condition of the mother's milk, and was not associated with its parent disease, gonorrhœa, until the beginning of the 18th century, when in 1736, a case of purulent conjunctivitis was reported by Astruc as directly infected from the urethra. This new theory made very slow progress and did not supersede the old until the experiments of Piringer established the relationship of these two diseases. In the second volume of his surgery, D. Hayes Agnew, writing on the nature of the "virus" of gonorrhœa says, "There are reasons for believing that the peculiar material which confers the specific property on gonorrhœal matter is intimately related to the pus corpuscles, as the experiments of Rollet tend to show that the liquor puris and the mucous constituents of the discharge when separated by filtration possess no infecting quality." It was but one step forward for Neisser to examine the corpuscle and discover in 1879 his biscuit-shaped intracellular diplococcus as the real cause of gonorrhœal infection.

In almost all of the cases of ophthalmia neonatorum infection occurs during delivery while the head of the child is passing along the genital tract of the mother, and is caused by the entrance of vaginal secretion into the conjunctival sacs.

The symptoms of ophthalmia neonatorum are so well known and so well treated in the many text-books that their enumeration would be but repetition of familiar facts.

The diagnosis of ophthalmia neonatorum is easily made from the objective symptoms and should always be substantiated by a microscopical examination of the pus. Although this disease is usually due to the gonococcus, it may be due or accompanied by the Koch-Weeks bacillus, the colon bacillus, the staphylococcus, or the streptococcus.

Ophthalmia neonatorum is usually a local disease of the eye, unaccompanied by complications of other organs, yet infection of the nose and throat, a vaginal discharge, syphilis, or even a general infection may occur as in the following case: A girl baby six days old, whose mother is of uncertain nationality and whose father is a Chinaman, was admitted to the Maine Eye and Ear Infirmary on the evening of December 8, 1910, suffering with ophthalmia neonatorum of both eyes. When she was stripped for her bath the next morning, it was found that she had a dislocated

middle finger of her right hand, an umbilical hernia, a vaginal discharge, and on either side of her vulva a discharging abscess. The next morning her left thigh became swollen and tender, and at night her dislocated finger became acutely inflamed. There was no change in her condition until December 14th, when an abscess developed on her right ankle and two days later, December 16th, another abscess developed on her left elbow. On December 22d, her swollen thigh showed fluctuation, and when opened poured out a large quantity of pus. The next day, December 23d, an abscess, her last, developed on her left knee, which had no connection with the abscess of her thigh. The pus from all the abscesses was examined by the microscope and showed the gonococcus in every instance, but the inoculated culture tubes of blood serum and nutrient agar showed no growths. There were apparently no constitutional symptoms accompanying these abscesses which would develop in a few hours and their presence was only discovered by frequent inspections of the naked body. The infection of the eyes was of a mild character and readily yielded to treatment. The dislocated finger was inflamed throughout the time but did not form an abscess. Six weeks after she was taken home she died.

The prognosis of ophthalmia neonatorum is always grave. The severity of the disease depends not only upon the resisting power of the child but upon the attacking power of the germ. Experience shows that an infection of the mother while in the puerperal state gives the most stubborn and persistent of ophthalmias, an infection at the time of conception, a milder attack, while an old chronic infection of the mother gives the mildest ophthalmia.

The treatment of ophthalmia neonatorum requires more careful and constant attention than any other disease of the eye, and is best carried out at an institution especially equipped for this purpose. It consists of keeping up the resisting power of the child, protecting the cornea, securing cleanliness, and combating the infection.

If a case must be treated at home, the patient should be quarantined in a room bared of all superfluous furnishings and attended by two nurses, one for day and one for night duty, on whose faithfulness and skill depends a large part of a successful result.

The nurses in charge of a case of ophthalmia neonatorum should wear long operating gowns with short sleeves, automobile goggles, and have antiseptic solutions into which they shall immerse their hands before and after touching the infected eye, and at each visit of the physician should be reminded of the possibilities of infecting their own eyes in moments of carelessness.

The keeping up of the resisting power of the child is accomplished by

regulating the quality and quantity of his food, attending to the action of the gastro intestinal tract, and by having the best of hygienic surroundings.

The protection of the cornea is of the greatest importance. Traumatism will denude the epithelium from the weakened cornea and give a focus for infection to the germs, and the resulting ulcer is fatal to vision. To prevent this infection, touching of the cornea by finger, swab, or even pledget of cotton must be avoided.

When a case comes for treatment, it is usually at the secondary stage. The swollen upper lid, whose surface is hot, dusky red, and tense, overhangs the lower and cannot be raised by the patient and only with difficulty by the physician. The conjunctiva is congested and ecchymotic, there is severe pain and a profuse discharge of pus.

To relieve the pain and swelling of the lids and conjunctiva, cold is used in the form of iced pledgets of cotton. A Boston oculist has used crushed ice between the layers of a cotton pledget, but the usual method is to keep pledgets of cotton on a cake of ice and to make application of these to the eye so frequently that a uniform degree of cold is secured. On account of the cornea, cold cannot be used continuously, but is used every hour or two for at least 5 to 10 minutes at a time.

To secure cleanliness, the pus should be removed from the eye as soon and as often as it gathers. This is accomplished by separating the swollen lids and wiping away with dry cotton the presenting pus and then douching this opened space by squeezing cotton pledgets saturated with boric acid or salt solution. At the Maine Eye and Ear Infirmary, a douche is given from an irrigator, whose smooth pointed glass tip is introduced under the outer angle of the upper lid, keeping away from the region of the cornea, and is passed backward, its end being held against the lid. Such a douche washes out all the pus collected in the conjunctival sac and shortens an attack of ophthalmia by removing cocci reached by no other means. Douching may be used as often as hourly, while the eyes should be cleansed by the simpler methods every 15 minutes.

Of all the drugs used to combat the infection, none is so good as nitrate of silver, but its irritating, self-limiting action and the manipulation necessary for its proper application have made an easy reception for the silver salts recently introduced. Coming in contact with the conjunctiva, nitrate of silver forms a precipitate on the surface of the conjunctiva, which prevents the drug from penetrating the deeper layers of the epithelium and attacking the germs that are lodged there. This coagulum is not absorbed for 24 hours, so the nitrate can be applied but once a day. To make an application of nitrate of silver requires the eversion of the lids, and this eversion of the swollen cushion-like lids, particularly when the child cries, is a difficult manipulation, often attended by traumatism sufficient to injure

and infect the cornea. If the cornea is infected, the traumatism may cause its perforation with its disastrous results.

Of the silver salts recently introduced, argyrol and protargol are used most commonly. Argyrol containing 30 per cent. of silver is a combination of silver and vitellin, a nucleo-protein, and protargol containing 8 per cent. of silver is an albumose. Physiological chemistry makes argyrol a questionable and protargol an effective product, as it teaches that the albumose is readily absorbed while the nucleo-protein yields proteid and paranuclein, whose conversion to proteoses and albumoses is slow and uncertain. That these salts have a weak bactericidal action has been proved in the laboratory but is contradicted by the experience of institutions and individuals. To the ophthalmological section of the American Medical Association, Standish reported from the records of the Massachusetts Charitable Eye and Ear Infirmary that of 50 cases treated by the nitrate of silver, 6 per cent. were unsuccessful; of 150 cases treated with protargol, 2 per cent. were unsuccessful; of 64 cases treated with argyrol, none were unsuccessful. These salts are prepared in aqueous solutions of strength from 5 to 25 per cent., and at the beginning of the treatment may be used hourly.

To prevent the lids from sticking together and damming up the pus, sterilized vaseline may be applied to their margins and a daily instillation of atropin will keep the eye at rest.

Prophylaxis in ophthalmia neonatorum is so well known and thoroughly established that reference to this important procedure at once suggests Cr  d  , who in 1880, by the instillation of 2 per cent. solution of nitrate of silver, reduced the percentage of cases in the Lying-in Hospital of Leipsic from 10 per cent. to 0.2 per cent. Investigation of recent years proves that 1 per cent. solution of the nitrate of silver is as efficacious as the 2 per cent. solution of Cr  d   and has the advantage of causing no silver irritation and requiring no counter-action by salt solution. What has been said in the treatment of the disease of the precipitation of the nitrate of silver by albuminous material is of as much advantage in the preventive treatment as it is a hindrance in the regular treatment, for the coagulum acts on a gonococcus as it does on an epithelial cell, and for this reason the nitrate of silver is superior to the silver salts.

Consultation with the Portland obstetricians shows that boric acid, nitrate of silver from 1 to 10 per cent. and argyrol 1 to 25 per cent. are used for prophylaxis, but only in suspicious cases.

Gynecologists give as a conservative estimate that 90 per cent. of married women have leucorrh  a, which is considered excessive if a napkin must be worn for its collection. Of these excessive cases, the gonococcus is the cause of 75 per cent., and on this account, ophthalmologists urge that

the genital tract of the mother be prepared for the eyes of the coming child by ante-partem douching or washing with antiseptic solutions.

Throughout this paper, I have shown that the cases of ophthalmia neonatorum are much too frequent; that the obstetricians are using prophylactic measures inconsistently; that there is no standard for preventive measures; that the adoption of a standard preventive will reduce the frequency of this disease.

Since the possibility of infection from the mother is so large, and since the instillation of a 1 per cent. solution of nitrate of silver is easy, harmless and preventive, I urge upon all obstetricians the necessity of adopting this treatment in the eyes of every child.

. . . DISCUSSION. . . .

Dr. SPALDING, of Portland: My experience with this disease covers about one hundred cases, all of which were charity cases but one. I have never called in a trained nurse, but treated the patients personally, oftentimes twice a day, and I have never lost an eye when seen in the early stages. Two prolapses of iris and some leucomata have been observed. In consultation, I have seen many blind eyes, and I have once advised enucleation for an eye remaining blinded and tender. My treatment has consisted in bits of linen laid on ice and applied very often during the day time, by one of the family, and less often at night. The discharge is wiped away as it exudes, and the cotton burnt. I open the lids once, sometimes twice a day, and drop into them two drops of a five grain solution of silver nitrate. The silver salts can be used oftener than this, but my experience with these has not been fortunate. The objection to all of them is, that they must be *fresh* and genuine. These objections cause me to favor silver nitrate which is always genuine and remains permanently fresh. Another serious objection to the abundant use of silver salts is the production of a permanent stain of the conjunctiva.

One-third of the blind owe their misfortune to ophthalmia neonatorum. This being a fact, it is a physician's duty to prevent that disease. So far as human knowledge goes silver nitrate or sophol, the latest silver salt, is a preventive. No physician can excuse himself from using such preventive, or salve his conscience for his neglect by saying that he never had a case and if he should have one the oculist could cure it. For such cases may come to anybody at any time, and some are consigned to total blindness, despite the best of care.

From an altruistic point of view, it is the duty of every physician to prevent this disease, because it is abominable to expose a colleague, or a trained nurse, to the frightful and unpaid risk of ruining an eye whilst treating an ophthalmia which he might have prevented. Physicians have had an eye disfigured and partially blinded and nurses have lost an eye, that had to be enucleated, in trying to cure an unprevented and unremunerative ophthalmia; not *somewhere else*, but right in Maine.

No physician with consideration for himself should neglect prevention of ophthalmia, because it renders him liable to a suit for malpractice, as has happened, not yet in Maine, it is true, but elsewhere.

I can see no practical reason for bacterial examination of the discharges in this

affection. Years ago we cured it with silver, not knowing why. To-day we use silver or the silver salts, we cure as we did before, but now we know why. This is interesting, as a study, and advances medicine, but I emphasize the point, that the country practitioner need have no fears that in omitting a bacterial examination, he is failing in his duty to his patient.

Finally, it is worth while recalling the interesting and undeniable fact, that ophthalmia neonatorum does not always depend on infection by gonococci. This may occur from infection by the discharges from an unhealed rupture of the cervix. Occasionally, also, the eyes being seen in a suppurative condition at birth, the disease must have originated from some pre-natal infection, which was neither cervical nor vaginal, but intra-uterine.

Dr. HOLT said: I had a few minutes to look over Dr. LITTLE's paper and feel sure that it will help all of us to renew and continue our interest in this very important subject.

I cannot understand why any physician should use boric acid solution, or any other solution, when it is the consensus of opinion that nitrate of silver is very much better, and, in a one per cent. solution, can do no harm to the eyes of any baby. It has been demonstrated, again and again, that boric acid in solution of any strength has little or no germicidal properties. Its value consists in the quantity of the solution used to wash away the discharge from the eyes of the baby. My experience taught me years ago that it was not so much the quality of the solution used as the quantity of it and the thoroughness with which it clears the baby's eyes of the discharge, especially that which collects beneath the lids in the retro-tarsal folds.

For this purpose I used a douche of a solution of common salt, known as the normal salt solution. This may be accomplished with a bulb or a fountain syringe and the quantity of the solution used should be sufficient to thoroughly remove all secretions from the baby's eyes. The smallest rounded point of the syringe should be introduced between the lids at the outer canthus, its point directed away from the eye-ball towards the retro-tarsal fold and the stream allowed to flow along the retro-tarsal fold, causing the discharge to come out between the lids. From one to three pints of the normal salt solution may be used to cleanse an eye at first, but as it is repeated at intervals of from one, two, or three hours, a smaller quantity will suffice to thoroughly cleanse the eye of all discharge. During the intervals of douching the eyes the one per cent. solution of nitrate of silver may be instilled and the eyes kept covered with cold packs. The intervals between using the cold packs should be at least twice as long as the cold packs are used, that is, if the cold packs are used for five minutes at a time, the interval before they are applied again should be ten to fifteen minutes. The functions of the different organs of the baby should be carefully cared for that the baby may be properly nourished and its resisting power kept up to its highest efficiency.

Dr. S. P. WARREN, of Portland: I have got something to say on this subject of the antepartum douche. I thoroughly object to that idea. I don't believe it is feasible or useful, and on the contrary I think it is directly injurious. I don't believe in sterilizing the vagina with any ordinary washing or douching. If the vagina is to be sterilized the patient must be etherized, as she would be if she were to have a surgical operation on the uterus and vagina, when the canal is sterilized before the operation. Supposing you do sterilize the vagina, you probably have gonorrhœa in the uterus itself, possibly in the tubes also. He long will it be before the sterilized regions will be infected? It is almost impossible to cleanse the vagina

of the parturient woman with any kind of scrub, such as would be made of gauze, without tearing the mucous lining, thus making an opening for the entrance of infectious material. Now how under heaven are you going to sterilize the birth canal of a woman, when it is filled with gonorrhœa? I don't know. Neither do I think it is a proper thing to do before the delivery of the child, unless you make a surgical operation of it, that is, scrub only while etherized. I have seen a good many hundred cases of labor, and have never seen an instance of gonorrhœal ophthalmia in my practice.

I therefore question whether antepartum sterilization of the birth canal is advisable. I doubt if the vagina of the ordinary woman is dirty enough to infect her children during their birth. Of course there are exceptional cases; in such, if there is the least suspicion of infection, whatever its character, it is the duty of the obstetrician immediately after the birth to use the nitrate of silver in the child's eyes. It don't matter how much you put in of the usual 2 per cent. solution, since you can neutralize it immediately with normal salt solution. I am not clear in my mind just what we are going to do about this antepartum sterilization of the birth canal. I would like to have Dr. LITTLE explain this matter a little more clearly.

Dr. GORDON, of Portland: I don't know but I have talked to the Maine Medical Association of my method of prophylaxis. I don't do very much obstetrics in these days—occasionally one of my old families, but for thirty years, before I stopped doing obstetric work, I washed every baby that I delivered, myself, and if every one of you men who do obstetric work will make your preparation before the child is born, with a proper bath-tub or anything that will hold water enough to put a baby into, and do it yourselves, have a sponge or gauze, any kind of an absolutely clean sponge, have your baby thoroughly oiled with some lubricant that will soften the skin properly, and then with soap enough, the purest soap you can get, wash your baby in the hottest water that you dare wash him in, put him in all over, and thoroughly wash that child as you would wash yourselves in a bath-tub, and I will guarantee that ninety-nine children out of a hundred won't have any ophthalmia neonatorum. You must do it about the eyes, about every part of the body. Don't let a nurse dabble with a little warm water that gets cold almost before she gets through washing the baby, but do it yourselves and then you will know it is well done if you carry it out exactly the way I have indicated. I have never seen in my whole practice but one case of ophthalmia neonatorum and that I very imprudently allowed the nurse to wash.

Dr. MITCHELL, of Brunswick: I would like to say a word about this paper. I have not much of importance to say excepting this, that I happen to have had in a practice of forty-six years—like Dr. GORDON in recent years my obstetric attendance has been infrequent—he says he has washed all his babies excepting one and I think he said he never encountered but one case of ophthalmia. I have had a good many hundred obstetric cases and I never washed a baby but once in my life, and I have had just one case of ophthalmia.—(Laughter).

Dr. DRISCOLL, of Portland: I think Dr. GORDON might have trouble sometimes in the way I am occasionally called—the baby perhaps having had his eyes open for an hour before I am called. For a number of years I used 2 per cent. silver nitrate for what I thought would be a suspicious case. I used for about two years, 5 per cent. argyrol. Last fall I was told a case of ophthalmia followed the introduction of argyrol, and since then I have gone back to nitrate of silver, using tablets, and for two years now I have used either argyrol or silver nitrate in every case. I think the law is right that compels the use of some preventive.

Dr. A. R. FELLOWS, of Winterport: In speaking of the prophylaxis, as the doctors all say we ought to use it in a good many cases and perhaps in all cases. I have taken a great deal of interest in Dr. WOOD's writing—and he put in a great deal of time, and he got very good statistics from the ophthalmic hospitals in New York, Philadelphia and Baltimore, and he made a great fight to do away with what he thinks is the greatest cause of blindness due to ophthalmia, namely, the midwife. Most of the cases that develop are not in cases that are delivered by physicians. In the city of New York, where we have a large population of outlandish people,—in the South, more particularly Baltimore and Richmond and Norfolk, where we have an excessive population of colored people,—there is a great tendency to call in a midwife in preference to a physician, and in the ophthalmic hospitals when we question the patients regarding their physician who attended them at the time of confinement, we find that there was no physician present but they had a midwife. In my little country town where I am located, in Winterport, two miles distant is Frankfort, where there are big granite quarries which employ in the neighborhood of seven hundred men. Probably in the neighborhood of five hundred of those people are Italians. The Italians have quite a family as a rule; not entirely Italians, some Spaniards there, some Poles, but the majority are Italians. It was just a day or two ago I was called into a place; wanted to know if I would write out a certificate and showed me the baby. The baby was born on May 11th, no doctor present at all. I have not as yet happened to have a case of ophthalmia among that class of people. But I think in our larger cities that most men will agree that most of the cases are due to neglect on the part of the patients themselves in not calling in a physician instead of a midwife, and we must do away with that end of it in order to clear up the disease.

MODERN PSYCHIATRY.

By HENRY W. MILLER, M. D., SUPT. MAINE INSANE HOSPITAL.

(Read before the Kennebec County Medical Association, December 30, 1910.)

A more appropriate but, perhaps, too elaborate title for my paper this evening, would be "The Modern Hospital for the Insane, its present status and some of the problems in connection with Modern Psychiatry." It is upon these phases of the subject of Psychiatry I wish to dwell.

Those of you who are not in close touch with the advance of this specialty, and I regret that the medical profession in general has not become readjusted to the renaissance in both ideals and methods which has occurred within recent years in our insane hospitals, have probably little conception of what is meant by modern psychiatry.

The criticism which was offered less than twenty years ago by Dr. S. Weir Mitchell, to the effect that the insane asylums of that time were little less than immense caravanseries and that their Superintendents were boarding-house keepers on a large scale, may appear to many of you as an accurate statement of fact applicable to present conditions.

These and similar misconceptions are so frequently and so forcibly brought to our attention that it is pleasing to know that those engaged in the study of mental diseases are striving to place psychiatry on the same plane with her sister sciences, and the professional work now being carried on in many of the insane hospitals of this country offers ample evidence that the science is advancing. It is somewhat humiliating to report that we have but recently passed beyond the boarding-house stage and have come, in comparatively recent years, to a realizing sense of the proposition that the care of the insane is a medical problem, with all the responsibilities which that term implies.

The average physician in general practice cannot be criticized for his lack of knowledge of mental disorders, for we know only too well that the opportunities for acquiring that knowledge, both in the medical school and since graduation, have been distressingly meagre. This lack of knowledge is not to your discredit, the fault rather lies with us than with you. The time has come, however, when we must seek the co-operation of the medical profession, when we must awaken your interest in our problem, and ask for your sympathy and assistance if we hope to reach and educate the public along the line of mental hygiene.

We have many problems, many of which cannot be reached without the active co-operation of the medical profession. The science of psychiatry is a broad one, intimately associated with psychology, neurology, physiology and sociology, and we must necessarily advance along broad lines. It will require the combined efforts of those directly associated with the work and the medical profession as a whole to bring about the conditions for which we are striving.

In this era of preventive medicine much is being accomplished, epidemic diseases all being reduced in intensity, circumscribed in area and rendered less harmful in their result, in consequence of the awakening of the public interest in medical problems. Tuberculosis is being fought with gratifying results; the so-called preventable diseases are promptly and carefully handled, because the public is educated to demand prompt preventive measure. Mental diseases are so complex, are so little understood even by the profession, and are so far reaching in their relation to the social and economic life that the movement tending to their prevention has not progressed with the rapidity of the movement in other departments of public medicine. The state has contented itself by developing most excellent humane and custodial care for the insane. In other words, it has, until within recent years, merely assumed the function of the preservation of the unfit. The problems of prevention and the scientific investigation which is thereby implied are only lately recognized as essential work in insane hospitals. Is there any reason why the function of the state should cease

when ideal conditions of custodial care are reached? Does the state's moral obligation to its insane and to the public not demand that something be done toward the cure and prevention of insanity? There can be only one answer to these questions.

In order to understand our present status, it becomes necessary to digress for a moment and trace the evolution which led up to the modern insane hospital. The historical evolution of the treatment of the insane is of much interest, but time forbids any further reference to that phase.

The history of the evolution in the treatment of the insane, the transition from the chain and dungeon era to the asylum era is a matter well known by physicians. About the time of Dr. Weir Mitchell's scathing criticisms, a concerted effort was made to place the asylum on the plane of the general hospital; this led to the abandonment of the word asylum and the word hospital was substituted. The appliances for treatment were modeled after the general hospital, so we find training schools for nurses were established, pathological laboratories were opened, the importance of the surgical side was, as usual in all hospitals, exaggerated, and the physical abnormalities of the patients were given most careful attention. While this movement improved the tone of the old asylums and while it was a progressive step, it was soon found that it had its limitations and that the methods of general medicine did not offer the means for solving all the problems of insanity.

Kræplin, who established the Heidelberg psychiatric clinic in 1890, is largely responsible for the impetus which brought about the modern revival in psychiatry. He approached the subject from the broad standpoint that insanity was primarily a mental disease and that it should be investigated from all quarters; clinical, psychological, physiological, anatomical and histo-pathological. Kræplin's breadth of view, his keen grasp of the situation, the practical nature of his classification from a prognostic standpoint stamped him as a leader, and his work has been closely followed in this country. We have perhaps been in error in seeking too strenuously for clinical entities as a result of Kræplin's classification and we may have overlooked the value of mental factors in the production of a mental disease.

This progress made it plain in the first place that we must investigate the disease at the earliest possible moment after its inception, and secondly, that the autopsy findings were of little value without a complete clinical record, and thirdly, that the cases had to be studied individually from every angle.

This, in brief, is our situation to-day, and I hope it gives you a comprehensive grasp of the situation and of the way we are trying to meet the problems.

Now for certain practical suggestions: I wish first to correct an error shared not only by the public, but also by many physicians, namely, the mistake of considering the insane under the motto "once insane, always insane." Insanity is not a hopeless condition. Many patients return from the hospital to an active and responsible life in the community. In the Government Hospital at Washington, with which I was connected, we had nearly 3,000 patients, with between 650 and 700 admissions yearly. The records for the past ten years show that there were discharged as recovered, over 30 per cent. of the number of admissions. I find essentially the same story in the records of the two Maine Insane Hospitals. We must get away from this hopeless attitude. It is engrafted into the public mind to such an extent that it has a pernicious influence upon the patient, who assumes a wrong mental attitude to his mental disease and his environments.

I wish here to pay my respects to a criticism which is heard altogether too frequently, that a physician in an insane hospital very soon forgets all the medicine he ever knew, and that after a perfunctory morning round, his duties for the day are over. This may have been true twenty or thirty years ago, but it is not so to-day. We require the best medical men we can get hold of, men as scientific and progressive as those in other departments of medicine, and if we have not such men, it is because they cannot be obtained. The result of the efforts that are being put forth to work out the problems I have outlined, is sufficient answer to the criticism that physicians in insane hospitals have nothing to do.

What suggestions have we to offer that will prove beneficial in curing and preventing insanity? In my opinion, the establishment of detention hospitals for the treatment of mental diseases in the early stages, which would render early treatment easy of access, without legal certification of insanity, is a step in the right direction. These psychopathic hospitals must, of course, be situated in large metropolitan centers. The fact that they are being established is an evidence of the tendency toward the realization of the hospital treatment of the disease. There is a detention ward in New York in connection with Bellevue, another at Albany; one is being built in Boston, and several other cities are advocating them. France, Germany and Italy are far in advance of this country in respect to the establishment of these clinics for acute cases. The advantages of early treatment are so patent that it is scarcely necessary to impress them upon you. It is, as I have stated, equally as important as treatment in the early stages of tuberculosis.

Aside from the benefit accruing to the patient, there is the added advantage of better clinical instruction to the medical students, that is, in cases where the acute hospital is located in a city where there is a medical

school. Unless the student is taught that mental diseases should be looked upon in the same scientific spirit as physical disorders and he has had an opportunity to familiarize himself with the symptoms of mental alienation in its early stages, we cannot hope for general practitioners better trained in psychiatry, for physicians who can detect the early development of insanity, and who can give advice in the management of such cases which will be of direct advantage to any community in which they may be located. Under present conditions the students cannot be expected to have but a smattering of knowledge concerning insanity. He has a few lectures, the cases which he does see are advanced, and it is not surprising that the present generation of general practitioners are so lacking in their knowledge of such an important branch of public medicine.

The function of a public hospital is not only to treat and ascertain the cause of disease, but it should serve, also, as a school for instruction. It is incumbent upon the state to seize the opportunity which the psychopathic hospital offers, which has proven so beneficial in other countries, and the public should acquiesce in this forward movement.

I wish now to call your attention more particularly to the problems of prevention. All this movement for advance work in hospitals for the insane has for its ultimate end the cure of the patient and a more intimate knowledge of the causes, the symptoms, etc., of mental diseases. This knowledge is essential before practical work in prevention can be instituted, and it is for this reason I have emphasized the importance of making adequate provision to obtain this knowledge.

You will admit without further demonstration, which I could easily produce, that insanity is becoming more prevalent, and that it is becoming an increasingly heavy burden upon the state; yet the lack of knowledge on the part of the public upon this subject has inhibited any public action toward stopping its ravages. We have certain definite facts relative to the causation of insanity with which the public ought to be familiar, but I fear we have been remiss in our duty that we have not taken any concerted action to spread these facts broadcast. We must make the experience of alienists available for the public welfare. The time has come when that part of the medical profession which has an intimate knowledge of insanity should advocate the enlightenment of the people concerning the causes of insanity. In our methods of prevention, we are lagging behind other departments of medicine, but we have the opportunity of instructing a public which has already passed through the primary course of instruction upon preventive medicine and which is eager for any knowledge which will assist in the personal and public prophylaxis of disease. A knowledge of danger is the surest means of guarding against it. I feel confident that once the danger signals are pointed out to the public, when once the causes of insanity become matters

of common knowledge, society will of its own volition take steps to remove those causes.

I have already referred to the necessity of educating the medical profession upon the subject of insanity; this is of importance not only on account of the prominent position physicians occupy in matters relating to the public health, but also on account of the intimate relationship which exists between the general practitioner and the individuals of the community. The family physician should be in a position to supervise the training of children, he should be called upon to give advice in educational matters, and he will be unable to exercise this function judiciously without proper instruction in mental hygiene. To fortify him with this knowledge, it will be necessary to give psychiatry a more prominent place upon the curricula of our medical schools, and I believe the time will soon come when the medical student will have as practical and as systematic a course in mental diseases as he now has in physical diseases. The psychopathic hospital is going to increase his opportunities of obtaining this knowledge.

What facts about insanity can we give at the present time, to direct personal and public activity? We can say we know of certain definite causes of insanity, such as heredity, alcohol, syphilis, mental stress and faulty environment. How to prevent the operation of these causes, which are in the abstract preventable, is a problem not sufficiently elaborated, but the fact that they are the most prominent factors in the production of insanity, should be impressed upon the popular mind, and we will not go far astray in taking the public into our confidence with the hope of evolving some scheme of practical prevention.

Let us consider the first cause, heredity. Here we are dealing with a factor about which we know something, but by no means all. The laws governing the hereditary transmission of mental diseases are not yet clearly fixed, and we are unable to give any accurate estimate of the relative value of hereditary influences in the production of insanity. However, it is known that an individual with what is known as a bad heredity, inherits a predisposition to an attack of mental disturbance. It may interest you to know that the number of instances that the same form of mental disease from which the parent suffered, makes its appearance in the offspring, is quite trivial, that is, the forms of mental disease in which there is what we call a homœomorphus inheritance, an inheritance of the same disease along the direct line of descent.

I am of the opinion that we have not, at present, advanced sufficiently far as to recommend legislation to control hereditary influences. Legislative enactment to prevent early and consanguineous marriages and the marriage of mentally unsound persons may be advisable. but it is a question in my mind whether such hasty action is called for. I am not in sympathy with

the laws which have been enacted in three of the states of the Union to sterilize mental defectives and chronically insane patients. It is not scientific, it is of doubtful humanity, and the failure of its results may have the effect of retarding wise legislation in the future. We should approach the subject of heredity from the scientific side, and we should not suggest legislation until we are sure of our ground and feel confident that we will accomplish something thereby. It would be preferable, instead of attempting to legally prevent the marriage of the unfit, of the feeble-minded and of the insane, to enlighten the public upon these matters. The moral imbeciles, the degenerates, the chronically insane, should not be allowed to roam at large. They should be segregated, and when the public is sufficiently educated to realize that this class of patients should be looked after, there will be no necessity of legislating to prevent them from begetting their kind.

A campaign of education will be the most potent influence in controlling hereditary influences. We can guide the growing mind of the child with a hereditary taint, we can classify the backward child, we can have a medical inspection of our schools which will mean something more than looking for defective teeth and contagious diseases. We can teach our children the principles of mental hygiene. In this way we can do something to control hereditary influence and prevent insanity. I feel certain that if society knew something about the nature of heredity and how its baneful influences could be corrected—if they knew what alienists know—they would very promptly take steps to retard these influences. There should be more publicity given to the facts which are already known, but those, who are acquainted with these facts, are at fault in not having given them to the public.

Coming to some of the other causes of insanity, alcohol and syphilis, both preventable causes, we can offer you here something definite as to the part these agents play in the production of insanity. Alcohol is directly responsible for from 10 to 15 per cent. of all insanity. Its indirect effect we have no means of estimating statistically, but from our own experience and the experience of others, who have given this subject serious study, we know that this percentage is correct. I do not care to suggest methods or approve of the existing methods to eliminate the use of alcohol. I simply wish to impress the fact about alcohol in insanity upon you. It is interesting to know that the really scientific work in temperance with regard to alcoholic drinks is being done by German alienists.

Syphilis is accountable for almost as large a percentage of the cases of insanity as is alcohol. General paralysis, or paresis, which makes up about ten per cent. of our admissions, is, in the opinion of the majority of alienists, due to syphilis alone. It also causes the other forms of mental disease as well as various nervous diseases. This is surely a preventable factor

which the individual and the state can assist in controlling. State regulation of prostitution will assist, but I do not think it will be as efficacious as the general recognition of the fact by society that syphilis is a most pernicious poison to the nervous system. We must deal with the subject of venereal diseases and the sexual question in a perfectly frank manner, and I see no reason why the growing youth should not be instructed in these matters, which have heretofore been spoken of only in whispers.

Such factors as mental stress and faulty environment are not easy to control, but public hygiene properly administered should include in its scope, not only problems of sanitation as we ordinarily understand them, but it should also include problems having to do with the mental health of the community.

I am firmly convinced that healthy public opinion is one of our most valuable national assets, and I feel the pressing need is education, knowledge of these matters which when spread broadcast will create a healthy public opinion. "Our healthy conscience," a term which has been very appropriately used in connection with the recent movement looking to the prevention of disease, a movement which is spreading rapidly over this country, demands that this phase of public medicine be given the prominence that it has not heretofore received. Matters of mental hygiene should be of as much official and individual concern as the control of tuberculosis, small pox and other contagious diseases.

I have treated perhaps in too fragmentary a manner a many-sided subject, and I only hope I have succeeded in awakening your interest in these vital problems.

INFANTILE PARALYSIS.

BY BERTRAM L. BRYANT, M. D., OF BANGOR.

(Read before the Penobscot County Medical Association, October 18, 1910, and the Piscataquis Medical Association, October 20, 1910)

The material for this paper has been drawn from the report and analysis of over five thousand cases of poliomyelitis in Europe and the United States, including the reports of the New York epidemic of 1907 of 2,500 cases, the Massachusetts epidemic of 1909 of 1,000 cases, those of Minnesota and Nebraska of over 600 each, and those in Norway, Sweden and Germany, also the latest reports of Flexner, of his experimental work at the Rockefeller Institute, and the pathological work of Strauss in the laboratories of Mt. Sinai Hospital and the Cornell Medical School. At the close of this paper I add the few cases that have come under my observation during the last three months.

There is no doubt but what there has been a great increase in the outbreaks of the disease during the last few years, especially in the northern part of the United States. Of the eight thousand cases reported during this period 5,500 have been contributed by this country, and it is from the careful study of these cases that we have gained an entirely new picture of the disease, from that formerly taught by the textbooks and medical schools. While that classic type is always found in every epidemic, it is but one of the several types included now under the head of Poliomyelitis.

The disease has formerly been one of northern climates and has been confined chiefly to the northern part of Europe and the United States, but recently there have been reported small epidemics in our Southern States and Cuba. Most of the epidemics have reached their height in the months of July, August and September, with few or no cases in the winter and months of early Spring. The disease itself is one greatly to be feared, not so much because of its mortality, (from five to twenty per cent.) but from the fact that it leaves about seventy-five per cent. of its victims to a greater or less extent permanently crippled. The great majority of cases occur in young children from the age of one to ten, but adult life and old age are not exempt, cases having been reported over fifty years of age and one of seventy years.

Infantile paralysis is caused by a virus, the elements of which are ultra-microscopic in size. They pass freely through the pores of porcelain filters, and up to this time have not been reproduced in artificial culture media. It has a high resisting power to external agencies. It withstands glycerinization like the virus of vaccinia for months. It retains its virulence unimpaired after being kept frozen for weeks, but it is readily killed by moderate heat slightly above body temperature, and by the weaker of the ordinary disinfectants. The virus has a high potency, as shown by the fact that very minute quantities, one thousandth of a c.c. of the extract will produce the disease when injected into the brains of monkeys, and the paralysis follows after the usual incubation period.

The pathology of the disease as it has been worked out by Flexner and Strauss shows that it is a general infection, not only of the cerebro-spinal axis, but often, in the fatal cases certainly, of the abdominal organs as well. Here swollen and often ulcerated lymph nodes and Peyer's patches are found and evidence of the acute inflammation of the kidneys, spleen and liver. The gross lesions in the brain, medulla and spinal cord consist of congestion and hæmorrhages into the gray matter, especially, but not exclusively into the anterior horn. The microscopic lesions are more pronounced and wide spread, and no part of the cord is free from inflammation, including the membranes. The severest lesions tend to occur in that part of the medulla or cord corresponding to the paralyzed muscles. The

first condition is that of a congestive infiltration more or less general, extending from the membranes along the blood vessels and lymph spaces into the nerve tissue. This is followed by degeneration and necrosis in the parts most affected. From these last we get our permanent paralysis and from the first or congestive conditions which do not go on to necrosis, the temporary paralysis. This explains why we so often see in the beginning paralysis of whole limbs or large groups of muscles all over the body, which in the course of the disease entirely recover their function or leave one or two small groups permanently impaired.

The data collected from the various epidemics leads us to believe that the disease is without doubt infectious and seemingly contagious; that the disease can be carried by intermediate persons from the sick to the healthy; and from the so-called abortive cases as well as from those frankly paralyzed. The period of incubation varies greatly from 2 to 20 days, but the normal average period is from 8 to 10 days.

The mucous membrane of the naso-pharynx is now considered as the most probable port of infection into the body. Monkeys are more readily infected by rubbing the virus upon this abraded membrane than by any other route other than the intra-cranial. And not only does this seem to be the most direct course of the inlet of the infection, but also for the outlet of the contagion, as monkeys are readily infected from extracts made from the membrane of the nasal pharynx of those suffering from the disease. So all secretions from the throat and nose should be considered as sources of contagion. Experiments have shown that infection may be brought about through other routes but not with the same certainty.

From the history of epidemics and from recent experimental work, it would seem that one attack of poliomyelitis produces immunity to any secondary attack of the disease. It seems to make no difference in monkey experiments whether the first attack was light or severe. At the present time the experimental basis is entirely inadequate to justify the attempt to induce active immunity as a protective measure in human beings. In monkeys a direct immunizing effect has been produced by increasing doses of a modified virus, and it seems probable that a virus will be ultimately prepared for the purpose of active immunization. Certain neutralizing principles are produced in the blood by an attack of poliomyelitis which remain for years and can be readily shown by laboratory tests. Fresh virus mixed with the serum from these cases will no longer produce the disease. If in monkeys infected with virus sufficient to produce paralysis, this serum be injected into the spinal canal, either the disease fails to develop or is greatly delayed. The production of an artificial serum is still in the experimental stage, and it is now a question if, outside of monkeys, any animal can be found from which the serum can be produced.

SYMPTOMS.

In certain cases there are no special symptoms of onset or they are so slight that they are not recognized, the paralysis being the first thing noticed. But usually there is an acute febrile beginning, temperature of 100 to 104, lasting from 2 to 7 days. Frequently there is a slight sore throat or digestive disturbances. In the New York epidemic, in 25 per cent. there was a history of vomiting. Pain and tenderness is present in a very large percentage of cases in the neck, back and limbs, especially over the involved muscles, often in the popliteal space and in the calves of the legs, some stiffness in the back as well, and the child complains of pain upon being touched or moved in bed.

In some of the epidemics profuse sweating has been frequently reported. The paralysis usually comes on in from 1 to 10 days of the onset; in one series of cases, 73 per cent. before the fourth day; but it may be delayed from 2 to 3 weeks. This at first may be more or less general, usually with loss of the deep reflexes, especially in the affected limb, or they may all be absent.

Various attempts have been made to divide poliomyelitis cases into groups. Wickman makes eight types of the disease.

FIRST—SPINAL POLIOMYELITIC. This is the recognized text book type, where a sudden febrile onset is followed by a paralysis of one or more limbs.

SECOND—ASCENDING FORM. In this type the paralysis ascends to the thorax and often causes death by the involvement of respiration. This covers many cases of the so-called Landry's paralysis. Most fatal cases belong to this class.

THIRD—BULBAR FORM. Here there is an involvement of the cranial nerves. Most often the facial, hypoglossal and ocular. And there may be involvement of the throat and larynx. This type may exist alone or in connection with paralysis of the extremities.

FOURTH—CEREBRAL FORM. With hemiplegia or spastic paralysis. This has not been satisfactorily established, although reports of cases of that type have been made.

FIFTH—ATAXIC FORM. A disturbance of motion much like Friedreich's ataxia may result from infantile paralysis. The seat of this may be in the cerebellum, the mid-brain or the bulbar portion, or it may be spinal.

SIXTH—POLYNEURITIC FORM. This is characterized by points of pain and tenderness, and the diagnosis is frequently difficult to differentiate from polyneuritis.

SEVENTH—MENINGETIC FORM. Pain and stiffness in the neck, perhaps, opisthotonos, and meningeal symptoms, frequently confused with cerebro-spinal meningitis.

EIGHTH—ABORTIVE FORM. In localities where infantile paralysis prevails many cases occur often in the same families, where fever, headache, stiffness of the neck and general disturbance may be present, but where the paralysis is slight and transitory, or does not occur at all. This form is of great importance as forming a possible link in the transmission of the infection. According to Wickman, in this group we may get cases of slight general infection, or symptoms of meningeal irritation. Cases with much pain like influenza, or cases with marked digestive disturbances.

DIAGNOSIS.

In the early stages before the onset of paralysis it is often impossible to make a diagnosis. It is more frequently confounded with gripe, rheumatism, auto intoxication and cerebro-spinal meningitis. Many of the abortive cases are never recognized. In the case of an epidemic it is well to treat with caution all cases of indefinite illness in children, especially if accomplished with rise of temperature, with soreness or pain in any muscle or limb or any meningeal symptoms. Between cerebro-spinal meningitis and infantile paralysis a lumbar puncture will at once clear up the diagnosis. The diagnosis must be made by exclusion.

TREATMENT.

In the onset and for the first few days of the disease the treatment is symptomatic. Isolation as in all cases of infection and contagious diseases, rest in bed, open bowels, light diet. As few drugs should be given as possible. For the pain, aspirin, codeine, and if absolutely necessary, morphine. After the acute pain subsides, there is usually a period of two to four weeks of sensitiveness and nerve tenderness. The chief thing is to guard against deformities, due to the stretching of paralyzed muscles. Patients should be kept warm and well nourished, have warm packs and gentle massage. It is well to avoid strychnia till all pain and sensitiveness are over. The stage of convalescence to recovery may last over a period of months or years. Two objects are to be obtained, to prevent deformity and to regain muscle and nerve power. For the latter, tonics and feeding, galvanic and faradic electricity, hydrotherapy and massage. Deformity due to the weakened muscles should be corrected or prevented by the use of light braces or supports. With these the child may be encouraged to exercise to a certain extent but not to the point of fatigue. These measures should be kept up for a long time, months and in many cases for years, until we are satisfied that all possible power and function has been restored. The last stage properly belongs to the province of the orthopedic surgeon, to whom

the patient should be referred for the correction of all deformities by apparatus or operation.

The following is a brief history of cases which have come under my observation within the last three months. All after the acute stage of onset had passed.

CASE 1. Patient a well nourished woman of 28, an experienced nurse, admitted to the hospital August 29th, discharged October 12th. She gave the history of having been on a hard confinement case and suffering from tonsillitis about 10 days before the onset of the present trouble. Two weeks before admission she suddenly began to have extreme pain in the back of the head and neck, with head drawn back, with fever. Twelve hours later left arm became affected. Later right arm also became paralyzed. Temperature lasted for several days with extreme pain, which was controlled by morphine. On admission patient complained of pain and tenderness along the spine and shooting down into the legs. Considerable muscular tenderness, especially in the left arm. Knee jerks exaggerated, lumbar puncture negative. Pain began to disappear after a few days, and there began to be a gradual improvement in the movements of the arms. On leaving the hospital after 6 weeks, patient had recovered the use of the right arm, excepting some weakness in the deltoid, but in the left arm the deltoid was paralyzed and had begun to show atrophy, and the flexors of the fingers had not fully recovered. This case was of the meningeal type.

CASE 2. This patient, a girl 22 years old, I saw first in consultation, but afterwards she entered the hospital for treatment, September 24th. Had been doing house work. Had diarrhœa for two days and then was taken with a pain in the back and head, with temperature. Up and down in bed for four days, then suddenly noticed that the left leg seemed lifeless, and would not support the body in certain positions, and then but for a moment. Pains continued in the leg for three weeks. Knee jerks absent, adduction of left thigh paralyzed and the extensors somewhat weakened. She has now been in the hospital for three weeks, and is able to stand and walk across the floor with some support. Can draw the knees together in bed with some difficulty. Should expect an almost complete recovery. This case was of the ordinary poliomyelitic type.

CASE 3. Child two years old was brought to me from out of town. The mother gave this history. Three months ago the child was perfectly well, and running about the house. Had some bowel trouble for a few days. Then the child suddenly refused to walk. Tenderness and pain in both legs for several weeks. Lost appetite and became very peevish. When I saw the patient it would make no effort to stand, but pain and tenderness had disappeared. Otherwise conditions were negative. Without doubt this was

of the ordinary poliomyelitic type. Legs not much atrophied. Should expect ultimate recovery.

CASE 4. Female child aged nine. Admitted to the hospital July 20th. Previously healthy. Three weeks before admission the mother gave history of child catching cold and not feeling well for a few days. Went to bed on Sunday with pain on left side, which soon became general. Temperature 101 to 103, some cough. On Tuesday. lost the use of the left arm, followed the next two days by paralysis of the right arm and both legs. Cough, loss of appetite, and fever. On admission complained of general pain when moved. Small areas of dullness in left lung with friction rub. Both knee jerks absent. Tenderness over the course of the large nerves of the limbs. Pain disappeared about ten days after admission. Soon after began to use the left arm and right forearm and hand. Right deltoid partially paralyzed, and left leg. I first diagnosed the case as polyneuritis, but am now certain that it was a case of infantile paralysis of the polyneuritic type.

CASE 5. Female child, aged twelve. Admitted to the hospital Aug. 8th. This case was a peculiar one, as it was masked by another condition. On July 3d, a physician was called to the child for an abscess on the right jaw. This was lanced on the inside. Patient ran some temperature for several days. That night the child strangled on attempting to drink, and the next day was taken with paralysis of upper limbs, right side of the face, muscles of the neck and upper back and left leg. Abscess twice filled and was at last opened on the outside and some dead bone removed. On admission there was considerable pain and tenderness over the nerves of the paralyzed areas. Loss of all the deep reflexes, including the knee jerks. At the present time the child has recovered the use of her legs, and walks well. The face has nearly cleared up, as have all the other muscles of the neck and limbs, excepting the biceps and the deltoid of the right arm, which are much atrophied, and will be more or less permanently so. This case was without doubt of the bulbar type and was masked in the beginning by the concurrent abscess of the jaw. It is remarkable in showing the great amount of temporary paralysis due to the first stage of congestion and to the relative small amount of permanent disability.

REPORT OF THE NECROLOGIST.

I have to report that during the year the usual number of deaths has occurred. Owing to misunderstandings, two deaths belonging to previous years were not reported until the current year. The list of deceased members now reads thus:

Alonzo Bishop Adams, Wilton.	E. G. Larrabee, Hebron.
George Edmund Brickett, Augusta.	Franklin C. Robinson, Brunswick.
William Buck, Foxcroft.	John Bedford Shober, Philadelphia.
C. E. Dow, Mapleton.	T. D. Sullivan, Calais.
Horace Franklin Hanson, Bangor.	Benjamin Williams, Rockland.
D. H. Kelley, Mattawamkeag.	

Greater progress could be made in keeping up these records if the Association would vote some small sum for postage, and for the preparation of a blank form for collection of data from relatives of deceased members. It is a great task to write letters of inquiry containing the same questions, year after year. It is a pity that members will not make an effort to hand in to the Secretary the data concerning their own lives up to date. A great many people whom I have met in this world deride the collection of biographical material, but I observe, nevertheless, that as they grow old they are very anxious that people should know that they have done great things during their younger days.

It is of those great things done that other people like to keep a record. Once more I urge the great value of compelling new members to hand in with their application for membership, all data concerning their birth, education, and practice up to date.

JAMES A. SPALDING, *Necrologist.*

DR. HARRY BUTLER.

Dr. Harry Butler, one of Bangor's most noted eye and ear specialists, and a mason of high standing in Maine, died on Tuesday, March 23, 1909, at the age of forty, after a lingering illness from Bright's disease. He was so unusually interesting and able a man, that it is difficult to condense into small compass the accomplishments of his active life in medicine and surgery.

He was born in Hampden, Maine, May 14, 1868, the son of General James H. Butler, a man of great value to the state during the civil war,

and Fannie Crosby, his wife. He was educated at Hampden Academy, and was graduated from the University of Maine as A. B. in the class of 1888. He taught school for a while, and then beginning the study of medicine was graduated at the University of Pennsylvania in 1895. After his examination for degree, he spent a long service in three different



hospitals in Philadelphia, appointments each time obtained by well proved skill in diseases of the eye, ear, nose and throat. Opening an office in Bangor he started in with general medicine and surgery, but so soon as he could work into his favorite specialties he won excellent success. Finding,

however. that there was much more to learn, he closed his office and obtained a position as Interne in the Massachusetts Eye and Ear Infirmary, where he soon became well thought of for his skill. Returning to Bangor he obtained and held to the beginning of his last illness a large practice in northern Maine. As an operator his work was on a high level of skill, whilst as an adviser he was sound and conservative. He was surgeon to the Eastern Maine General Hospital, member and President of the Penobscot County Medical Society, member of the Maine Medical Association, and of the Maine Eye and Ear Association, consisting of the leading eye and ear surgeons of Maine. In this society he was held in high esteem for his genial ways, his charming companionship, his excellent opinions on special surgery and on matters concerning the public health, as exemplified in medical supervision of schools, and scientific examination of the eyes and ears of school children. He was also a member of the American Medical Association and of the New England Otological and Laryngological Society.

Dr Butler belonged to many social organizations, was fond of out door life with its accompaniments of canoeing, fishing and hunting, was devoted to music, and had great fondness in his leisure moments for the collection of postage stamps. He was also much interested in Masonry, and was an active member of many local lodges.

Dr. Butler married Miss Caroline Norriss, daughter of Dr. Louis Edwin Norriss of Hampden, and Elizabeth Stetson his wife; she and two children, the issue of this happy marriage, survive him. He was a most agreeable man socially, made hosts of friends, endeared himself by his winning ways with his patients, in this way built up a fine practice, and will long be remembered as a delightful, honest and honorable practitioner of medicine.

J. A. S.

Severe neuralgic pain over the bridge of the nose indicates pressure on the anterior ethmoidal nerve probably due to a high deviation of the nasal septum.

American Journal of Surgery.

Many a distressing frontal headache may be relieved by reducing the hypertrophy of a middle turbinate, preferably by streaking with trichloroacetic acid.

American Journal of Surgery.

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Editorial Comment.***An Investigation Welcomed.***

(Journal A. M. A.)

"Since the publication of the charges made against Dr. Wiley by his official enemies, Congress has taken a hand in the affair and an investigation of all the facts leading up to the present episode has been called for. No one will welcome such an investigation more than will Dr. Wiley, unless it is the general public. But it must be an investigation and not another official whitewashing. A real investigation will show several things. It will show, for instance, that Dr. Wiley made powerful enemies when he ruled against a mixture of crude alcohol and a small amount of real whiskey being labeled 'whisky.' It will show that he incurred enmity when he declared that inferior wheat was adulterated when it had been bleached by chemical process to resemble a high-grade product. It will show that he aroused violent antagonism when he protested against the use of such chemicals as sodium benzoate, saccharin and copper sulphate in foodstuffs. It will show that he made an implacable foe of the glucose trust when he protested against its product being sold under the misleading and euphemistic name 'corn syrup.' It will show, also, that he set in motion a tremendously powerful and vicious organization when he exposed the frauds and dangers inseparable from the 'patent-medicine' business. All this it will show, and much more, that Dr. Wiley has done in the interest of public health and safety. Then, too, if it is a real investigation, we may learn why the hundreds of thousands of dollars that have been spent on the investigations by the Referee Board should have come out of appropriations intended for the enforcement of the Food and Drugs Act. We may learn why, although it is illegal to pay a pharmacognocist more than \$11 a day when acting as an expert for the government, legal experts for the government may be paid as high as \$150 a day—out of 'contingent funds.' We may learn why the cases which were started by Dr. Wiley's assistants against the Duffy Malt Whisky outfit have been held up for years by his superiors and have not yet come on trial. It may show, although we are hardly optimistic enough to believe that it will, what relationship there is between the Vice-President of the United States and the Duffy Malt Whiskey interests. It may show

why two small-calibered men were put in a position of equality with Dr. Wiley so as to handicap his aggressiveness in the public interest. It may show a number of other things—providing it is a real investigation. One thing it will show, and that is that Dr. Harvey W. Wiley has been standing alone, fighting the people's fight for pure food and pure drugs, abused, maligned, and vilified by special interests, and receiving little support from his official superiors. And by the time the investigating committee is through with its work Dr. Wiley's position before the country will be strengthened, while the machinations of his enemies will have been exposed."

Since the above was written, the Congressional Investigating Committee have been holding meetings and getting at the facts in the case.

It will be remembered that Attorney General Wickersham was of the opinion that Dr. Wiley merited "condign punishment" for entering into a secret agreement with Dr. Rusby, the New York pharmacognocist, that his rate of pay should be twenty dollars per day, whereas the law did not allow a sum in excess of eleven dollars per day.

It now transpires that Dr. Wiley never made such an agreement.

Dr. Rusby agreed with Dr. Bigelow, an assistant in the Bureau of Chemistry, who had been asked by Dr. Wiley to find out upon what terms Dr. Rusby would work, that if the Department of Agriculture approved, he (Rusby) would give 100 days' work in each year, of seven and one-half hours each, for \$2,000.

Having come to this agreement with Dr. Bigelow, Dr. Rusby wrote a letter to Dr. Wiley, the Chief of the Bureau, informing him of the result.

Before sending it, however, he learned that Dr. Wiley was away from Washington. So the letter was never sent. A carbon copy, however, was preserved in his files, and later when the trouble started and his correspondence with the Department of Agriculture was called for, this carbon copy fell into the hands of the Attorney General.

Such agreement as there was, therefore, was with the subordinate and not with the Chief, and in any event it was to be effective only "if approved by the Department."

Moreover, there was nothing "secret" about the agreement if the Department of Agriculture was to be privy to it.

At the Inquiry, Dr. Wiley stated that he had received no report from his subordinate, regarding this agreement, and in fact knew nothing about it nor of the means by which the compensation of \$2,000 was arrived at.

As Dr. Wiley asked Dr. Bigelow to ascertain Dr. Rusby's price, it seems remarkable that he never heard the result of the negotiations. But be that as it may, the technical charge against Wiley has broken down, unless substantiated by further evidence, and it is to be hoped that this valuable official may continue to safeguard the foods and drugs of the country.

C. R. B.

Insanity.

Rarely does a movement start for the betterment of humanity, that does not originate in the ranks of the medical profession. Each city and town has its health board under the supervision of a state board, while each session of the various legislatures finds new and more drastic health laws enacted, showing the activity of our profession to surround an uninformed public, not only with information, but with protective laws for their own betterment.

A family physician is, of necessity, a great moral force in a community; but in the midst of all of our work in the field of preventive medicine, what are we doing to prevent nervous and mental disease, or lessen the number of criminals? This issue contains a paper by Dr. H. E. Miller, Supt. of the Maine Insane Hospital, and deserves careful reading. The Editor was fortunate enough to have spent a year as Assistant Physician in one of our large private institutions for the insane; also was very courteously entertained by Dr. Miller and the members of his staff, during a recent and brief visit to the Institution, and urgently recommends all who can, to visit our insane hospitals as frequently as possible. We unhesitatingly promise you a most courteous reception and treatment; whereas the knowledge obtained will be of the greatest possible value. You may rest assured that there is a field for preventive medicine in nervous and mental diseases.

The Criminal.

It has been said that no sane person ever committed suicide; in other words, to take one's own life is the act of an insane mind. So also must be the act that leads the average human being to do a criminal act. It can easily be seen how, once he is made an outcast, he is very likely to continue this life. In a letter to the State Board of Prison Directors of California, and published in the Pacific Medical Journal, Abraham Reuf, ex-boss and convict, reviews at length the conditions of prison life. At a rough estimate, about one in every 300 of the entire population of the state is branded a criminal, and about one in every 600 is a branded felon. This is equivalent to about one in every 60 families being a convict and one in every 120 families a felon. Furthermore, every convict was related to 5 or more families, leaving comparatively few families not directly interested in some solution of this great question. In Mr. Reuf's opinion 50 per cent. of the convicts are not criminal at heart or by nature and that they are capable of restoration to good citizenship; of the remaining 50 per cent., "over

half would, under proper guidance and support, with proper government, and under proper control, be capable of being made into good citizens and useful members of society."

He advocates the formation of a fraternal benefit organization within the prison walls, with annual dues of \$3.00 or some such nominal sum. When a prisoner was not able to supply necessary funds, he could then contribute "promissory notes" for such dues on prepared forms, on which shall be printed the distinct understanding that the payment of such notes will never be demanded or compelled and that they shall be payable only at the maker's option and pleasure. The organization will be affiliated with the prison committee on the outside and under the direct supervision of the prison officials. They shall hold meetings at stated intervals for transacting business, etc. The great object being to better qualify the inmates to take up life again when discharged and supply a fund to which they have contributed as members, to tide them over that uncertain period up to the time they become self-supporting again.

This is an extremely brief *résumé* of Mr. Reuf's suggestions, as it does not include his reasons or arguments for and against his plan, which will conclusively prove that he has carefully studied these questions, from all sides, and offers a most rational beginning in this problem of how to deal with the discharged convicts.

The true physician fully realizes that the human being is a victim of habits. If these habits are regular in that they partake of no excesses, he will be a normal individual, but if, by chance or environment, he develops habits which are detrimental to his physical or moral welfare, he is still human and deserves aid rather than pity. The relatives of the convict should be made to see that, rather than his being a disgrace to the family, he has met with a sad misfortune, the circumstances of which he had not the strength of mind to overcome. He stands in need of their confidence and counsel to bridge over his past life and become a better man. No class of men are better qualified to teach these facts than the members of the medical profession, and none have better opportunities. Let us try to improve them. If we cannot all agree on the humane side of this question, then, as a tax payer, look up the cost of arresting, convicting and subsequent care of the criminal class, and we will find that a 25 per cent. to 50 per cent. reduction in criminal cases will lessen the taxes materially. It then becomes a financial question that interests us all.

Present Status of Maine Medical Library.

Shortly after the June session of the Maine Medical Association, work was begun on the Maine Academy Library, and we are pleased to report

a complete systematic arrangement of the books, in sections. Each section is labeled and the shelves numbered, while the books are indexed and cross indexed, so that in looking up any reference work, it can be done either by title or author. The library rooms will be open from 9 A. M. to 5 P. M., with Miss Moore in charge. Members of the Association can consult works at the library or make arrangements, whereby, books can be sent to them. In addition to the old library, there have been some few new volumes added.

Arrangements have been completed whereby the library receives all the state Medical Journals, together with some twenty or more valuable independent Medical Journals. It is on the mailing list for the board of health Bulletins from all the states.

Arrangements are now being made to receive the various Government reports, and within a few months we hope to have the beginning of a reference library that will give to our members all that is new, together with a good many valuable old works.

The Negro Physician.

"Conceived in no spirit of racial exclusiveness, fostering no ethnic antagonism, but born of the exigencies of American environment, the National Medical Association has for its object the banding together for mutual co-operation and helpfulness, the men and women of African descent who are legally and honorably engaged in the practice of the cognate professions of medicine, surgery, pharmacy and dentistry.

" 'Reading maketh a full man; conference a ready man, and writing an exact man.' These desirable attributes a doctor may attain from the Journal. Reading the Journal will bring the first; telling your friends about it will bring the second, and reporting your interesting cases will bring the third."

The above is copied from the front cover page of the "Journal of the National Medical Association" and speaks volumes for the work of the colored race. Less than a century ago, the race was subjected to slavery, with little or no opportunity for advancement.

Since the emancipation of slavery, schools and colleges have come into existence for the exclusive use of the colored race. Not only have they mastered the Classical Courses but have entered the various professions, whereas in medicine they have their own medical organizations, while their National Association has its official Journal, a review of which will convince any fair minded physician of the volume of work that is being accomplished by the race. It should receive the encouragement and co-operation of the entire medical profession, whose training broadens their con-

ception of life and leaves the human instincts most strongly developed. To the intelligent physician, there can be no race difference, judged from the humanitarian standpoint, between the colored and white race, but each individual, of whatever race, will be classified according to his moral and intellectual attainments.

Ancient Arterial Disease.

(Worcester Post).

The results of the studies of the arteries of Egyptian mummies now published by Dr. Marc Armond Ruffer bear strongly against some widely prevalent notions about diseases supposedly of recent origin and caused by tobacco, alcohol, athletics, and the wear and tear of modern life. Using ingenious methods, which the well known medical and surgical journal, the *Lancet*, declares to have been "satisfactorily scientific" for getting into shape and dissecting the mummies and other material found in the burial grounds of Egypt, Dr. Ruffer has found evidence of extensive existence of these diseases among ancient Egyptians and prehistoric men.

He declares arterio sclerosis and arterial degenerations to have been common conditions, which, says the *Lancet*, are "the pathological 'horrible example' held up by anti-tobacconists, total abstainers, diet faddists of all kinds."

The marks of disease observed by Dr. Ruffer are widespread; he concludes that "the old Egyptians suffered as much as we do now from arterial lesions identical with those found in the present time," for few of the arteries were quite healthy.

There is no trace of tobacco having been used by the ancient Egyptians. They certainly were not then any more than now meat eaters, so that the cause of which vegetarians attribute the diseases in question must be eliminated. Alcohol Dr. Ruffer also sets aside, for though the Egyptians used alcoholic drinks they never were drunkards any more than they are nowadays. Moreover, he made 800 post mortems on Musselmans, who never touched alcohol in their lives, and found arterial lesions just as frequent among them. Finally he does not believe that excessive muscular exercise was the cause of the ancient prevalence of those diseases, for evidence is lacking that the Egyptians were addicted to athletic sports, and the priests and priestesses of Deir el Bahara, whose mummies he examined, certainly did not indulge in them.

Dr. Ruffer's conclusion is that our life is easier and that we work less and are better nourished than our ancestors. And the general idea to which his studies point is that the diseases that afflict mankind are all or

nearly all about as old as the race. The so-called "diseases of civilization" are simply those which our forefathers did not know enough to diagnose. In some cases, of course, special causes and differences in ways of living have had special results in the disease line, but the general progress has been towards better health.

COMMITTEE REPORTS.

To the President and Members of the Maine Medical Association :

Your committee appointed by the Association, to visit the Medical School of Maine, through the courtesy of the Trustees of Bowdoin College, beg leave to report.

The Ninety-first Annual Course of Medical Instruction began in this school in October, 1910, and continued for thirty-six weeks. Of a four years' course, instruction for the first two years is held in Brunswick, and the following two years in Portland. The Faculty consists of fifteen Professors, and Assistant Professors, with twenty-eight Instructors and Assistants.

During the year 1910-11, seventy-three students were enrolled, as follows :

First year students,	-	-	-	-	-	24
Second year students,	-	-	-	-	-	15
Third year students,	-	-	-	-	-	14
Fourth year students,	-	-	-	-	-	20

Making a total of 73, 28 of whom had previously received the degree of A. B. from some reputable college.

Instruction is given in all the various branches of Medicine and Surgery, which is taught in the larger schools.

The primary branches are well taught during the first two years by able Professors and assistants, at Brunswick. The course in Pathology, Bacteriology and Hygiene, is probably better and more comprehensively taught in this School, under the instruction of Prof. Whittier, than in any of the smaller medical schools of New England.

The faculty is composed of some of the ablest physicians and surgeons in Portland and Brunswick, and the instruction is the best that can be accomplished, unless greater clinical facilities can be supplied to the school.

The opportunities for clinical instruction is furnished by the Maine General Hospital, the Children's Hospital, the Female Orphan Asylum, St.

Elizabeth Orphan Asylum, the Holy Innocents' Home, the Portland Charitable Dispensary, the Maine Eye and Ear Infirmary, the Maine School for Deaf and Dumb, and by the City Physician and other private sources.

Clinics are held five days in the week at the Maine General Hospital. Students are obliged to make diagnoses, observe special symptoms, discuss special phases of disease, and write prescriptions for the same, and defend them before teacher and class.

There is a fine co-operative spirit manifest between teacher and students, and the students had seemed to grasp the subjects well, as evidenced by oral and written examinations.

June 21st, the degree of Doctor of Medicine was conferred upon sixteen graduates. A great majority of these graduates settle in Maine, and in a large measure the physicians and surgeons of the state are in a way responsible for the number of students attending the School. If the School is to be enlarged; if teaching and clinical facilities are to be increased and intensified, then there must be an awakened co-operative spirit between the school and the medical profession of the commonwealth.

Bowdoin College, acknowledged to be one of the most progressive and strongest smaller colleges, so called, of the country, has little difficulty in obtaining large and munificent endowments for its academical departments, whereas small sums have latterly been invested by the trustees for the betterment and advancement of teaching in the Medical School, which is a component part of the College.

It is to be regretted that Profs. F. H. Gerrish and Alfred Mitchell are to retire from the respective chairs of Surgery and Internal Medicine, in the School, at the close of the current year, after many years of eminently successful teaching. They have both left a lasting impress upon students of medicine in this state for many, many years, and their retirement will carry with them the universal respect, admiration and love of a profession, knowing and appreciating their great skill as physicians, surgeons and teachers.

Your Committee of Visitation holds its appointment through the courtesy of the Trustees of the College. If there is to be any greater co-operative spirit, between this body and the Medical School, this is evidently the year and opportunity for you to act, and place yourselves in a position to enlarge its functions and increase its co-operative influence in the School.

Respectfully submitted,

A. L. STANWOOD,
EDWIN M. FULLER,

Committee of Visitation to the Medical School of Maine, 1910-11.

JOURNAL REVIEW.

The Treatment of Localized Appendicular Abscess.

VAN BUREN KNOTT, M. D., JOURNAL OF THE A. M. A. AUGUST 12TH.

In this paper Knott gives his conclusions based upon 283 operative cases of sharply localized appendicular abscess. The appendix was removed in every case, no matter whether it presented with little or no search or whether it was deeply imbedded in adhesions. He had a mortality of three cases and says that this result is infinitely better than that which obtained under former methods.

Knott's conclusions seem to be based upon sound surgical principles, for it certainly seems unsurgical to leave a rotten, putrid appendix in the abdominal cavity depending solely upon drainage to cure the case. A point of vast importance is his statement that in the search for the deeply buried appendix he encountered very frequently small pus collections among the adherent intestines. The liberation of this pus resulted in a much speedier and smoother convalescence. The breaking up of adhesions during removal of the appendix lessens the liability to post-operative obstruction. He strongly, and rightly so, insists upon free communication between the site occupied by the appendix and the abscess cavity and the recto-vesical pouch in the male and the cul-de-sac in the female. This allows, in connection with the Fowler position, the drainage of the most dependent part of the peritoneal cavity and with one large drain. The drain emerges at the lower angle of the incision, which is through the right rectus, and does not come in contact with the vitiated area formerly occupied by the abscess.

In the discussion following the paper several men advanced the idea that while such results might obtain with a highly skilled man they would not obtain with others. It seems as if it was about time that surgeons stopped advocating one thing for the skilled man and something else for his less fortunate colleague. The fact remains that if one is competent to perform major surgery at all he should be competent to perform it in a manner which surgical experience has demonstrated to give the best results. Any man who assumes the moral responsibility of doing abdominal surgery should be competent to perform the operation described by Knott. A careful reading of the original paper will be of value to any man, be he an internist or surgeon.

F. H. JACKSON.

Book Reviews.

A Manual of Clinical Diagnosis by Means of Laboratory Methods. For Students, Hospital Physicians and Practitioners. By Charles E. Simon, M. D., Professor of Clinical Pathology and Experimental Medicine in the College of Physicians and Surgeons, Baltimore. Seventh edition, enlarged and thoroughly revised. Octavo, 780 pages, with 168 engravings and 25 plates. Cloth, \$5.00 *net*. Lea & Febiger, Philadelphia and New York, 1911.

As in purchasing an automobile, so in buying a medical book, we may well feel that if the one or the other has been through eight or ten years service it must have been of real original merit, and its little defects have been pretty well eliminated in the latest model or edition. Certainly this is true of Dr. Simon's "Manual of Clinical Diagnosis" appearing this year in its seventh edition. The book can be recommended to every physician using laboratory methods of diagnosis as a complete and standard guide.

The chapters dealing with the blood and urine are particularly well written, and the illustrations of the blood corpuscles are almost perfect. The practitioner will find in the book many helpful hints as in the italicized directions for the use of the microscope in the study of urinary casts. The book is up to date and contains the best description we have yet seen of the method of performing the Wasserman Reaction.

An entirely new and valuable feature of this edition is found in Part II, where are taken up alphabetically the various medical diseases with the essential features in the laboratory diagnosis of each. This part alone makes the book worth buying, especially for the older practitioner, that he may intelligently interpret the findings of his younger assistants.

P. P. T.

Practical Hygiene. By Charles Harrington, M. D., Late Professor of Hygiene in the Medical School of Harvard University, Fourth Edition, Revised and Enlarged by Mark Wyman Richardson, M. D., Secretary to the State Board of Health of Massachusetts. Cloth. Price, \$4.50 *net*. Pp. 850, with illustrations. Lea & Febiger, 1911.

While this work undoubtedly has its greatest appeal to health officers and sanitarians, yet it cannot fail to interest the student or practicing physician who wishes to keep abreast of the times in matters of public and personal hygiene. Nearly one-third of the volume is devoted to foods, including their description, nutritive value, methods of analysis, and tests for im-

purities. Air, soil, and water are each considered in a separate chapter, especial attention being paid to their chemical analysis and the detection of pollutions in each. A special chapter is given to dwellings and school-houses, with regard to their general construction, lighting, heating, ventilation and plumbing. Separate chapters treat of the disposal of sewage and garbage, and the various methods of disinfection. There is a comprehensive section on military, naval and tropical hygiene. The last quarter of the book is devoted to personal hygiene, infection and immunity, vaccination, quarantine and the disposal of the dead.

The latter part of the volume, especially the last two chapters, have evidently been hastily and slightly prepared, but otherwise it seems to have borne out the claim of the publishers as to its value. R. B. M.

Diseases of the Stomach. With Special Reference to Treatment.

By Charles D. Aaron, Sc. D., M. D., Professor of Gastroenterology and Adjunct Professor of Dietetics in the Detroit College of Medicine; Professor of Diseases of the Stomach and Intestines in the Detroit Post-Graduate School of Medicine, etc. Octavo, 555 pages, with 42 illustrations and 21 plates. Cloth, \$4.75, net. Lea & Febiger, Philadelphia and New York, 1911.

It is a pleasure to review a book of this sort. Perhaps because, as the author says, "it is intentionally practical and therapeutic." It is all this and more. It is up to date.

As an illustration of this take the treatment of Gastric Ulcer. Besides the treatment by diet, lavage, and bismuth, directions are given for intestinal alimentation by means of Einhorn's duodenal pump. The pump is passed through the stomach into the duodenum and left in situ for from 10 to 14 days. The food is introduced through the pump into the duodenum and the stomach is thus placed completely at rest.

The use of antiseptic serum in this condition is discussed, as well as a vaccine of the *bacillus coli communis*, suggested by Turck's work on the etiology of gastric ulcer.

The book is also strong on its theoretical side. As witness the discussion of "Sea Water Therapy." This is based upon Quinton's law that "Animal life, which appears as a cell in seas of well-determined saline concentration, in order to maintain its optimum cellular activity has always a tendency throughout the zoölogical scale to keep the cells of which each organism consists in the aquatic marine conditions of their origin." In other words, the cells composing our bodies are still marine organisms

bathed in a saline fluid which we call "serum," and of course variations in the saline content of this fluid, will cause disturbances among the cells.

There is a special chapter on "Medications," in which the various drugs used in stomach disorders are grouped together.

There is a strong chapter on "Alterations in the Position of the Stomach and other Abdominal Organs."

But where so much is good it is hard to particularize.

C. R. B.

Progressive Medicine. A quarterly digest of Advances, Discoveries and Improvements in the medical and surgical sciences. Edited by Hobart Amory Hare, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College, Philadelphia, assisted by Leighton F. Appleman, M. D., Instructor in Therapeutics, Jefferson Medical College, Philadelphia. September 1, 1911. Lea & Febiger, Philadelphia and New York. Six dollars per annum.

Progressive Medicine for September, 1911, covers diseases of the thorax and its organs, dermatology and syphilis, obstetrics, and diseases of the nervous system. Under diseases of the thorax, the tuberculosis dispensary, and especially the tubercular dispensary are discussed; the latter differing from the former in that the tubercular treatment is more generally used. The dispensary is pointed out as a necessary adjunct to the sanatorium. The treatment of tuberculosis and other pulmonary conditions by means of continuous antiseptic inhalations through a respirator, is considered at some length. In asthma, anaphylaxis is the latest idea in current literature, though anaphylactin has not been demonstrated in the blood of patients by several investigators. Under edema and its causation, the theory of capillary malnutrition, as furnished by Cohnheim and Barlow, and the colloidal theory of Fischer are reviewed. The latter insists that it is increased acidity of the tissues that leads to edema, producing nutritional colloidal changes in the capillary walls and surrounding structures. Henderson's Acapnia Theory of Shock is described at some length. He argues that there is no vasomotor failure, but that the essential failing element is the venopressor mechanism, and that shock is produced by a diminution in the normal amount of CO_2 dissolved in the blood. The CO_2 is thus the "hormone" or chemical regulator of the tone of the tissues and veins particularly. The treatment of moderate shock consists in using intra-venous infusions of normal salt solution saturated with CO_2 . In severe cases, hypertonic saline solution must be used or the transfusion of blood.

Under diseases of the heart, Dr. W. S. Thayer's paper on the "Commoner Types of Functional Cardiac Murmurs" is reviewed at length. He

discusses three types of functional murmurs, and considers that a familiarity with these functional types is as important as an acquaintance with the organic.

Auricular Fibrillation is regarded as the "greatest discovery" of practical importance in the clinical pathology of the heart. Its advent throws the four chambers of the heart into abnormal action. Mackenzie estimates that it is the cause of the onset of dyspnœa and dropsy in 70 per cent. of cases. The treatment consists in absolute rest and the use of digitalis.

Under dermatology and syphilis, the subject of skin cancer is dwelt on at some length. The importance of external influences, as chronic irritation of the skin, is emphasized, but despite the most painstaking efforts, no light has been thrown on the cause of cancer. As far as treatment is concerned, beside excision, the local application of acid nitrate of mercury as developed by Sherwell is recommended and discussed. The treatment of syphilis by arsenobenzol receives due attention, the subject occupying 18 pages. The conclusions of Dr. W. S. Gottheil, who reviews the literature, are as follows: Arsenobenzol does not cure syphilis, and its effects on the disease are variable. It should be used in conjunction with the mercury and iodine treatment, and always with great care, never in ambulatory cases in office practice.

Fully one-third of the volume is devoted to obstetrics. Many articles on the pathology of pregnancy, presenting the latest ideas on eclampsia, pernicious vomiting, etc., are reviewed; likewise many surgical conditions complicating pregnancy. The section on Cæsarean section is very full and complete.

In regard to the treatment of syphilis of the nervous system, which is considered among many subjects under "Diseases of the Nervous System," the consensus of opinion seems to be that it exerts a favorable action on tertiary lesions, but has no effect, either favorable or unfavorable, on the parasymphilitic diseases, tabes and general paralysis. Considerable space is devoted to a résumé of the latest work on poliomyelitis, the germicidal action of serum of patients who have had the disease, and the use of lumbar puncture and laboratory findings of the spinal fluid.

T. J. B.

MAINE MEDICAL SCHOOL.

WILLIAM DEWITT HYDE, President, Bowdoin College, Brunswick Maine.

My dear Dr. Hyde:—Dr. Addison C. Thayer has submitted to me plans and specifications for a building to be erected upon India Street in Portland, Maine, to be used by the Bowdoin Medical School as a dispensary in the City of Portland.

I hereby agree to furnish the necessary amount of land required for such building, and money sufficient to erect and equip a building under the direction of the authorities of Bowdoin College, as per plans and specifications submitted to me by Dr. Thayer. The conditions which I should require in connection with furnishing the land and necessary amount of money to erect and equip said building are as follows:

1st. The building and equipment shall cost not to exceed twenty-three thousand (23,000) dollars, exclusive of land.

2d. An endowment fund of not less than \$50,000 shall be established for the permanent conducting of this dispensary, the principal to be kept intact, and the interest only used in the administration of the dispensary.

3d. The building shall be known as The Edward Mason Dispensary.

Very truly yours,

(Signed) HUGH J. CHISHOLM.

The above is a copy of a letter to President Hyde from Mr. Chisholm and indicates the activity of the new Dean of the Medical School. We are all more or less familiar with the criticism that appeared in the report, published by the Carnegie Foundation for the advancement of teaching and Dr. Thayer is struggling hard to supply those needs and place the School on a high plane.

If the profession of Maine will co-operate with him, having always in mind that a kind word of commendation will tend to make his work easier, whereas criticism always leaves a few more obstacles to be overcome, the results will speak for themselves.

Few, if any of us, give much thought to the amount of time and energy necessary in any constructive organization work. The Medical School of Maine should be a non-partisan body, representing the best possible teaching force. It has failed, then the physicians of the state should know why and wherein lies a remedy.

If a patient prepared for ureterolithotomy has a sudden surcease or an exacerbation of pain—and even without these if the stone is quite small—have a final skiagraphic exposure just before operating. If the stone has slipped into the bladder it is better for both patient and surgeon to discover this by the x-ray than by the knife.—[*American Journal of Surgery.*]

County News.

CUMBERLAND.

PORTLAND MEDICAL CLUB.

The September Meeting of the Portland Medical Club was held at the Columbia Hotel, Thursday, September 7th. twenty members being present.

After routine business was transacted, reports of cases were made by Drs. Swasey, Warren and P. P. Thompson. The essay of the evening was by Dr. Alfred Mitchell, Jr., subject, "Operations for Bladder Stone."

"Dating from the time of Hippocrates' oath and Ammonius (276 B. C.) the operation of Lithotomy is traced in its various forms and with its many reverses to the present time. On account of the high mortality in older times, the method 'by the lesser apparatus' was used mostly in children under 14. The method 'by the major apparatus' was invented by John of the Romans in 1526, and for 150 years was a secret in the family of Colot. The route here was by the bulbous urethra. The lateral method was begun in the 17th century, and the bilateral, although invented in 1750, was not used until the 19th. The quadrilateral and rectovesical methods were also fully described.

"The Hippocratic method was not used extensively until 1836, although Pierre Franco devised a suprapubic method in 1560, which later fell into disrepute.

"Following the use of a drill, Jacobson of Copenhagen, in 1836, devised a curved crusher to be introduced by urethra, and this instrument, together with the evacuator of Bigelow of Boston (1878), made greatest advances in this line of work.

"In diagnosis, the Stone Searcher, X-Ray, and Cystoscope give the greatest aid, and of the present day methods litholopaxy is the operation of choice with a skilled operator; a cutting operation with the general surgeon. Suprapubic lithotomy is the choice if there is associated prostatic obstruction or sacculated bladder; perineal operation, if severe stricture. With infected kidney or severe ammoniacal cystitis, drainage by some route is necessary. In children litholopaxy is the operation of choice if a 16 French sound can be taken, otherwise, suprapubic lithotomy.

"In mortality percentages, litholopaxy makes much the best showing."

A paper was discussed by Drs. Gilbert, C. W. Foster, and Driscoll. Adjourned at 9.20.

H. J. EVERETT, *Secretary.*

ANDROSCOGGIN.

Meetings of the coming year of 1911-1912 will begin the first Tuesday of October.

FRANKLIN.

June 15th, about twenty members and friends took a delightful trip, by automobile, to the sanatorium at Hebron.

The management kindly extended to us a very hospitable reception and we enjoyed an exceedingly pleasant and instructive day.

We had a short business meeting at which the following members were present: Drs. Howard, Nichols, Makepeace, Sanborn, Pratt, Bell, Head, White.

SEPTEMBER MEETING.

A regular meeting was held September 22, at Farmington. Dr. Elmer J. Brown of Stratton was elected to membership. Case reports were presented by Drs. Colby, Ross, York, Head, Nichols, Makepeace and Pratt.

The case reported by Dr. Colby was that of the successful use of salvarsan in a case of syphilis.

In the evening there was a banquet at the hotel. Dr. E. W. Gehring, of Portland, gave a brief, but interesting talk on vaccine therapy and tuberculin, after which he read an extremely interesting paper on "Altruism and Egoism in Medicine."

Dr. F. Y. Gilbert, of Portland, spoke in the interests of the Maine Medical Journal and the work which it is doing for the profession in Maine.

Dr. Gilbert also spoke on some of the conditions met in eye, ear, nose and throat work.

Dr. A. J. York was appointed a member from Franklin County of a committee to investigate various conditions relating to the welfare of the profession of the state.

G. L. PRATT, *Secretary*.

SOMERSET.

The next County Meeting will be held December 7, 1911.

WASHINGTON.

The St. Croix Medical Society meets every month regularly, and although the attendance is small, yet many subjects of great interest are

discussed, with great profit to those who care to attend. The subject for the last meeting was "The Chemical and Microscopic Examination of the Urine as an aid in Diagnosis." Dr. H. B. Mason, of Calais is President of the Society and Dr. J. D. Lawson, of St. Stephen, is Secretary.

OXFORD.

The regular quarterly meeting of Oxford County Medical Society was held at Cobb's Hotel, Mechanic Falls, on Monday, September 25th.

In the absence of the president and vice-president, Dr. H. L. Bartlett was chosen as president pro-tem.

Some interesting clinical cases were reported by the members and visitors present.

The Society was honored by the presence of Dr. Stanley P. Warren, President of the State Society, Dr. F. Y. Gilbert, Editor of the State Journal, Dr. E. W. Gehring of Portland, and Dr. W. D. Williamson, who is an honorary member of the Society.

Dr. Gehring read an able and instructive paper entitled "Concerning the Importance of Attention to Details in the Practice of Medicine," which we believe will be of material benefit to all those present.

In his paper the doctor presented many practical points gained from his studies here and abroad, which were made more clear and forcible by the questions and discussion following.

Dr. Stanley P. Warren was called on and addressed the Society on matters of common interest to both State and County Societies. He urged the necessity of broader acquaintance and more social intercourse among brother practitioners and suggested some new ideas regarding the program at State Society Meetings.

Dr. Gilbert spoke at some length regarding the affairs of the Journal and State Society and made many suggestions for the consideration of the members.

Among other things he recommended that a member of one be appointed from each County Society to investigate and confer with each other and with the members of their respective Societies, concerning physicians' liability insurance, medical charities, osteopathic boards and board of health work.

Following his suggestions, Dr. J. A. Nile of Rumford was appointed as such a committee of one with Dr. D. M. Stewart of South Paris as alternate.

Dr. W. B. Haskell of Oxford read an interesting and instructive paper

entitled "A Clinical Study of Ulcers, Lacerations and Burns," which was discussed by the members and visitors present.

The application of Dr. H. M. Heald of Buckfield was presented and he was elected to membership in the Society.

Number present 12. Adjourned at 2.30 P. M.

D. M. STEWART, *Secretary*.

YORK.

The next meeting of the York County Medical Society will be held October 12, at the City Hall, Biddeford.

PERSONAL NEWS AND NOTES.

Dr. A. H. Stanhope of Foxcroft recently entered Dr. King's Hospital, Portland, for a surgical operation, from which he has recovered and returned to his home.

Dr. Frederick C. Thayer, of Waterville, was the guest of Portland friends Friday and was on his way to Saratoga, N. Y., where he attended the meeting of the Supreme Council.

Dr. Elmer J. Brown has settled in Stratton, Me.

Dr. H. E. Milliken enjoyed a two weeks' vacation, visiting Medical Institutions in Boston, New York, Philadelphia and Baltimore.

Dr. Alfred King has begun work on his new home in Deering in the neighborhood of his hospital.

Dr. J. F. Thompson has plans drawn for a summer home at Blackstrap and the foundation will be put in this fall. The Doctor recently purchased a large lot of land and is conducting, on a small scale, a modern farm.

Dr. Frank W. Searles, who spent the summer months in Robbinston, Me., has returned and opened an office at 778 Congress St.

C. F. Painter, M. D., of Boston recently visited the St. Croix, being called to operate on a case in orthopedic surgery for Dr. S. E. Webber.

Dr. Dickinson, of Houlton, was in Calais last week, being called in consultation to one of his old patients.

M. P. Smithwick, M. D., specialist of stomach diseases, of Boston, was a recent visitor to Calais, seeing different patients in consultation in his specialty. During the evening a reception was given him at the home of

one of the Calais physicians. At this, Dr. Smithwick gave a splendid talk on calculi of the ureters, which was very much appreciated by the many physicians present.

Dr. Sullivan, of St. Stephen, who has been away on a few weeks' vacation, has returned, looking much better for his trip.

Last Sunday, Dr. Mason and Dr. Miner, of Calais, were called to Lord's Cove, Deer Island, N. B., to do an abdominal operation for Dr. Murray of that town.

Dr. T. J. Burrage has returned from a three weeks' sojourn at the Cape Shore.

Dr. George Geer has returned from a trip through Massachusetts.

Dr. L. A. Derry is at present on an automobile trip to Saratoga Springs.

Dr. H. J. Everett has returned from a week's stay at French's Island.

Dr. E. W. Gehring has returned from a two weeks' vacation in Boston.

Dr. Charles Bray is on a vacation in the northern part of the state.

Dr. F. L. Ferren, of Westbrook, is on a two weeks' vacation through the eastern part of the state.

Dr. Frederic H. Gerrish has gone abroad for a much needed rest.

Dr. Stanley P. Warren, President of the Maine Medical Association, was the guest at the Waldo County meeting. He also has visited Oxford County and Sagadahoc during the month of September.

Dr. E. W. Gehring, of Portland, read papers before the Franklin County and Oxford County Medical Societies at the last meetings.

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NO. 4.

Original Articles.

DIAGNOSIS AND TREATMENT OF CANCER OF THE BREAST.

By R. W. WAKEFIELD, M. D., OF BAR HARBOR.

(Read before the Maine Medical Association at Augusta, June, 1911.)

Ever since medical history has been recorded, each century has had some world-wide disease with which to contend. Although cancer and tuberculosis have afflicted mankind from time immemorial, yet I believe they have been the two greatest problems to confront the medical profession during the twentieth century.

Such a splendid campaign of education of the public has been carried on, especially during the last decade, that tuberculosis bids fair to be well under control before another decade passes, although, I am sorry to say, it still heads the mortality list.¹

Cancer ranks sixth¹ in the mortality list, yet this disease is increasing so rapidly, I consider it the greatest problem with which we have to deal at the present time. According to the best analysis of statistics¹ obtainable, there are at present 225,000 cases of cancer in the United States, with a yearly mortality of 75,000 persons.

In other words, about one person out of every twelve hundred of our population dies every year from cancer. In England, it is estimated that, of individuals over thirty-five years of age, one out of every eight women

and one out of every eleven men die of cancer, a greater death-rate for age period than from tuberculosis.²

In regard to cancer of the breast, to which I wish now to call your attention, at least eighty per cent. of the tumors occurring in this organ are cancerous. Rodman³ carefully analyzed the statistics of five thousand cases of mammary tumors, taken largely from the German clinics, and found that 16.5 per cent. were benign, 2.7 per cent. sarcomas, while the remaining 80.8 per cent. were cancerous.

DIAGNOSIS.

It is not my purpose to occupy your valuable time by reading you a classical diagnosis of cancer of the breast, for this may be found in any standard text book on surgery, but, rather, to discuss this subject from a practical standpoint and present the problem as one encounters it in the office or at the bedside.

When a patient presents herself with a tumor of the breast for an opinion as to its nature, a complete family history is certainly desirable, but, to my mind, not very important.

That heredity plays much of a role in the occurrence of cancer has not yet been established. Paget, an ardent advocate of the importance of heredity in cancer, maintained that cancer occurred much more frequently in the antecedents of cancer patients than in the antecedents of the non-cancerous. However, the results of more recent investigations are opposed to this view.⁴ The occurrence in rare instances of families in which cancer is notably frequent appears to be well established, but this occurrence is regarded by many as not remarkable, but as wholly consistent with the law of chance in the distribution of cancer throughout the population.

There can be no question about the importance of the personal history.

While cancer may be encountered at almost any age, yet by far the largest number of cases occur between the ages of thirty-five and fifty years, the so-called "Cancer age." Twenty per cent. occur between the ages of forty-six and fifty-one.⁶ I recall seeing a cancerous breast in a patient twenty-seven years of age, and another case in which the patient's age was seventy-eight years, but these cases are not common.

Women who have borne children are more likely to develop mammary cancer than their maiden sisters, and especially is this so where there has been breast trouble during the lactation period, resulting in a chronic mastitis or abscess. Long continued local irritation certainly seems to predispose to malignant disease, not only in the breast, but other parts of the body as well. It is generally supposed that cancers often develop from

severe single injuries, but there is no evidence that single injury does other than call attention for the first time to a pre-existing tumor or hasten the growth in early or dormant malignancy.⁵

To illustrate this point, I have lately seen a case of cancer of the breast in a woman sixty-five years of age, who gives the history of a fall six months ago, striking on the right breast. At that time, she discovered a lump in her right breast, due, she thought, to the fall, and the lump has rapidly enlarged. Upon examination, I am quite sure the tumor existed long before the fall, on account of the extensive involvement of both the axillary and cervical glands. I refused operation, because the disease had progressed so far. When the cervical glands are palpable, the time for a cure has passed, in the vast majority of cases.

A history of a persistent, although perhaps gradual, loss of weight and strength is always significant of malignant disease.

A history of pain in the breast has not received the attention to which it is entitled. It has long been held by some that this symptom is of no significance, but I believe that a large majority of malignant growths of the breast are accompanied by pain, and this is especially true of scirrus carcinoma. A patient of mine, not long ago, suffered most intensely from a returning scirrus tumor after a late radical operation had been done.

EXAMINATION OF THE BREAST.

In the examination of the breast itself, it should be remembered that the outer quadrants are more often involved with malignant disease than the inner, and the upper quadrant more often than the lower.

Retraction of the nipple is most significant, but not, as often stated by some high in authority, pathognomonic of carcinoma.

According to Rodman,⁷ retraction will be encountered in only 52 per cent. of undoubted cancer, while it may be present, in more or less degree, in perfectly benign conditions, as, for instance, congenitally depressed nipples; in patients who have had mastitis, with or without abscess; and those with marked hyperplasia of the connective tissue in connection with abnormal involution.

Gross found the nipple retracted in 5.22 per cent. of non-carcinomatous growths.

DISCHARGE OF THE NIPPLE.

If there is a discharge from the nipple, the character of this discharge helps in the diagnosis, but is not so great an aid as some would have us believe. If the discharge is scanty, thin and bloody, it is certainly suggestive of carcinoma, whereas a mucoid one is evidence of a benign growth.

Thick, granular contents always suggests malignancy. One may see a discharge of blood from an intracystic papilloma, but this tumor always shows a marked tendency to undergo malignant change.

Cancerous tumors become adherent to the surrounding tissues even early in their growth, and this is especially true of the scirrus variety.

The adhesions occur to the skin, muscle and fascia. Upon palpation these growths are hard, irregular, non-encapsulated, infiltrating, and immovable, while a benign growth feels soft, smooth, circumscribed, encapsulated and movable. A carcinoma may be more or less movable in its early stages, but it soon becomes attached to the neighboring tissue.

Theoretically there may be a time when a cancer is local, and the glands in anatomical connection with the diseased breast not involved, but that these glands become involved with cancer cells early in the disease, there can be no doubt, and often before they can be palpated.

As the diseases advances, these glands progressively enlarge and may break down and ulcerate or become the site of secondary growths.

According to Rodman,⁸ the most skillful diagnosticians are only able to diagnose about 75 per cent. of breast tumors before operation. To my mind, if the average surgeon is able to diagnose half the breast tumors before operation, he is doing well.

How then are we to diagnose at least 25 per cent. of breast tumors, concerning which the most scientific men are in doubt? Are we to make the best guess we can and trust to luck that we are right, or are we to consider all these doubtful tumors malignant and deal with them accordingly? Are the reports from frozen sections reliable or is it better to simply enucleate the tumor and wait for a few days for a formal report from the laboratory.

If one is fortunate enough to have the services of an expert pathologist, who can in a few moments diagnose the nature of the tumor by means of the frozen section at the time of operation, there need be no mistake in diagnosis, or, at least, very few.

Rodman⁹ says that during the past seventeen years, he has had fifty cases examined by means of the frozen section with only two errors. One of these errors was made by an inexperienced pathologist who had never before made a frozen section, and the other error was only detected after thirteen specimens had been examined in the usual way.

Other leading surgeons of large experience in breast surgery, such as the Mayos, of Rochester, Bloodgood, of Baltimore, and Maurice Richardson, of Boston, have confidence in the frozen section, and often use this method of diagnosis in doubtful cases.

Dr. Charles Mayo in a letter to Rodman, stated that, of three hundred cases thus reported, no error had been made. This certainly speaks well for the pathologist at St. Mary's hospital.

In obtaining the specimen, the whole growth, together with some of the surrounding normal breast tissue should be removed, and the wound immediately cauterized. By this method the danger of disseminating the cancer cells is reduced to a minimum, and hardly need be considered.

Unfortunately most surgeons, especially we here in the State of Maine, have not access to an expert pathologist with his frozen section, and how are we to deal with these doubtful cases? To simply enucleate a suspected tumor and then wait a week or ten days for a formal report from the laboratory, I believe is a procedure so dangerous that it should be condemned in no uncertain terms.

I managed a few of my early cases in this way, but am convinced in the light of greater experience that these cases were ill advised.

To my mind it is far preferable to consider doubtful cases malignant, especially if the patient is in the cancer age, and deal with them accordingly. In other words, if we are obliged, by force of circumstances, to hazard a guess, let it be on the side of radicalism. I had rather be guilty of radically removing innumerable breasts containing benign growths than to do an incomplete operation in one cancer case. On the one hand, your patient is alive, although more or less disfigured; on the other, your patient is doomed to a horrible and certain death.

Maurice Richardson says in a recent article on Cancer of the Breast that "to perform an unnecessarily extensive operation is preferable to subjecting the patient to the dangers of auto-infection."

"We should remove, breast and all, those tumors in the diagnosis of which there is enough uncertainty to call that uncertainty a reasonable doubt. We should remove from the breast or explore those tumors in the benignancy of which we have enough indecision to call that indecision a reasonable doubt. We should leave untouched only those growths in which we are so positive that we would let them go in the case of our nearest and dearest."

TREATMENT.

Prophylactic Treatment of Cancer of the Breast. Since it is always more commendable to prevent disease than to cure it, I want to say a word in regard to the prophylaxis of cancer of the breast.

I believe one of the most important measures in preventing this disease is to carefully remove any new growth as soon as seen.

Although benign tumors may be dormant for years and cause the patient no ill effects, yet they are liable at any time to undergo malignant change and rapidly enlarge.

This seems to be especially true of cysts, and woe be to the surgeon who mistakes a malignant for a benign cyst. An incomplete operation on

a malignant cyst invariably means death to your patient, no matter how many subsequent operations are done.

Long continued local irritations should be avoided, such as may be caused by corset stays, pins, buttons or other hard objects fastened to the clothing.

Obstetric surgeons should use every means to prevent breast troubles in parturient women, such as cracked nipples, abscesses, etc. Keen¹¹ quotes Williams as saying that obstetricians who have breast infections in more than 1 per cent. of their cases are careless.

That certain countries seem to be predisposed to cancer is due, I believe, more to chronic irritations incident to their occupations than to climate, soil or diet.

It has often been noted how resistant some individuals are to the ravages of malignant disease, seeming to possess more or less natural immunity; while others melt down rapidly.

Some work has been done, lately, in securing the blood serum of the resistant individuals and administering the same to victims of poor resistance. How successful this work has been, I do not know.

To my mind there is only one treatment for cancer of the breast, and that is a complete removal of the breast, including the pectoral muscles and fascia, and all glands in anatomical connection with the breast that are accessible.

The only exception I would make to the above statement is when one encounters one of those unfortunate cases where the disease has progressed so far that there is absolutely no hope of a cure, even by the most radical procedure. I would treat these cases, with the X-ray or radium or any other palliative means that would make the patient the most comfortable.

Of course, one might encounter a case where some serious contra-indication to an operation, other than the tumor itself, might be present. Under such circumstances, it might be wise not to operate but treat the patient as an inoperable case.

The technic of any one of a half-dozen of the leading surgeons may be chosen. The more one operates, the more one develops a technic of his own. My favorite operation is that of Willy Meyer. In this procedure, the dissection is made from the axilla toward the middle line, thus working against the lymph strain and lessening the liability to disseminate the cancer cells.

The main point in the operation is to remove all the disease. The more extensive the operation, the better the result, provided the dissection is extended in the same direction as the disease, and provided the patient lives; but there should be reason in all things.

The dissection should extend along the line of the lymphatics and

great vessels. This line of metastasis after breast operation accounts for by far the greatest number of failures, and yet there are many recurrences in the immediate anatomic vicinity of the tumor-seat of the breast.

Maurice Richardson¹² regards the following as a reasonably thorough operation:

Take the whole breast and the skin about its margin; the pectoralis major and the subjacent tissues down to the thoracic walls; the axillary contents as far back as the latissimus dorsi, as high up as the first rib, and as deep as the posterior border of the scapula. The upper axillary dissection requires the removal of the pectoralis minor.

Patients usually stand these operations well. I have been amazed at how little they affect even elderly cases. In Richardson's¹³ fifteen hundred cases, there was not a death from shock.

Halsted claims that the loss of blood is alone accountable for shock in these operations. With all due respect to such a distinguished surgeon, it has always seemed to me that the length of time consumed in the operation is a factor with which to reckon. I believe this operation should seldom consume more than one hour, and if prolonged to as many as two hours one is liable to encounter more or less degree of shock, even if the hemorrhage is well controlled.

The mortality from these operations is very low. Richardson¹⁴ lost four cases out of his fifteen hundred, while Bloodgood, Rodman and the Mayos report equally good results.

Although the X-ray has its enthusiastic supporters, and it must be admitted that brilliant results are, at times, obtained, yet I believe it should never take the place of the knife as a curative agent, but should be used as a post-operative measure or in inoperable cases.

The indications for radium are the same as those of the X-ray, but up to date it seems less useful.

COLEY'S FLUID.

Another palliative measure that has its advocates is Coley's fluid.

It has been noted by surgeons for many years that when a patient suffering from malignancy became infected with erysipelas, the tumor ceased to grow or even decreased markedly in size. Working on the theory that this infection was antagonistic to malignancy, Dr. Coley of New York elaborated a fluid which represents the toxins of the streptococcus of erysipelas and the bacillus prodigiosus. In 1906 Coley reported thirty-six cases of his own and sixty cases treated by others in which some brilliant results were obtained.

The fluid seems to be more effective in sarcoma than carcinoma.

Although there is some risk in making these injections, yet some surgeons use this agent quite extensively.

Gibbon of Philadelphia tells me he used Coley's fluid, together with the X ray, as a routine in the post-operative treatment of malignant growths.

My last word to you is, do not procrastinate in dealing with tumors of the breast. Surgeons need this advice as well as the general practitioner. The one great blot on surgical practice is failure through unjustifiable delay.

Do you want to take the responsibility to tell your patient the lump in her breast amounts to nothing and to simply put it out of her mind, when you know that delay in the extirpation of breast tumors may be attended by appalling consequences? If you do this, sooner or later you will be put on the defensive and will have to answer to your conscience why you permitted a breast tumor to develop into hopelessness when a trivial operation was safe and possible.

CONCLUSIONS.

I. I believe cancer is the most important disease with which the medical profession has to deal at the present time.

II. Heredity does not play much of a role among the predisposing causes of cancer.

III. Long continued local irritation seems to predispose to cancer.

IV. Pain, as a symptom of cancer, has not received the consideration to which it is due.

V. Retraction of the nipple is not pathognomonic of cancer, although very significant.

VI. The character of the discharge from the nipple is not a great aid to diagnosis.

VII. The glands in anatomical connection with the breast become involved early with cancer cells.

VIII. According to Rodman, the most skillful surgeons are unable to diagnose 25 per cent. of breast tumors.

IX. In the diagnose of doubtful cases, frozen sections are reliable.

X. The practice of simply removing suspected tumors and waiting for the laboratory report should be condemned.

XI. If one has not access to the frozen section, tumors suspected of malignancy had best be radically removed.

XII. To prevent cancer of the breast, all new growths should be removed at once, chronic irritations avoided and obstetric surgeons should be careful to avoid breast troubles in parturient women.

XIII. The treatment of cancer of the breast is complete removal.

XIV. Patients withstand the operation well, as a rule, and shock is uncommon.

XV. I consider shock due to two causes, viz: loss of blood and unnecessary length of time consumed in the operation.

XVI. The X-ray, radium, or Coley's fluid should never take the place of the knife as a curative agent, but should only be used as palliative measures in inoperable cases or in post-operative treatment.

XVII. Delays are dangerous in dealing with breast tumors.

BIBLIOGRAPHY.

1. Bulletin 8, Mortality Statistics 1909—Bureau of the Census.
2. Chas. H. Mayo, Jour. A. M. A., Vol. LV, No. 19.
3. W. L. Rodman, Jour. A. M. A., Vol. LVI, No. 11.
4. E. E. Tyzzu, Jour. A. M. A., Vol. LV, No. 18.
5. C. H. Mayo, A. M. A., Vol. LV, No. 19.
6. W. W. Keen, Textbook of Surgery.
7. W. L. Rodman, Jour. A. M. A., Vol. LVI, No. 11.
8. Ibid, Jour. A. M. A., Vol. LVI, No. 11.
9. Ibid, Jour. A. M. A., Vol. LVI, No. 11.
10. Maurice Richardson, Jour. A. M. A., Vol. LVI, No. 5.
11. Keen's Textbook of Surgery.
12. Maurice Richardson, Jour. A. M. A., Vol. LVI, No. 5.
13. Ibid, Jour. A. M. A., Vol. LVI, No. 5.
14. Ibid, Jour. A. M. A., Vol. LVI, No. 5.

SURGERY.

BY H. F. TWITCHELL, M. D., OF PORTLAND.

(Read before the Sagadahoc County Medical Association.)

The history of surgery well illustrates how a craft may struggle for centuries, making little advancement, finally to be elevated by new scientific discoveries, to the dignity of an art.

From prehistoric times to the last century surgery made no profound impression upon the world. But in the last hundred years the progress has been so great as to far overshadow all of its previous recorded achievements.

Doubtless surgery has been practiced ever since savage man inflicted wounds upon his neighbor. There is evidence in prehistoric skulls from Peru, that trephining was done in the stone age. Egyptian and Jewish history indicate surgical practice in that ancient time; but this almost mythical evidence is more interesting historically than scientifically.

Hippocrates was in his prime four hundred years before Christ. He was no myth. He was very much a man. He was the Lister of the pre-Christian era. He did trephining, herniotomy, lithotomy, and drained the pleural cavity; and was so far in advance of his time, that, for five hundred years it was a struggle for the surgical world, simply to retain what he had given. Then that other Greek—Galen—appeared, who strengthened and added to the teachings of his great predecessor.

He applied ligatures to wounded arteries; but, so far as we know, they were not used in amputations until fourteen hundred years later by Ambrose Paré. From Galen to Paré, thirteen centuries intervened—the period of the dark ages. Paré's improved treatment of wounds, substituting for boiling oil, cleanliness and support—and the application of ligatures to arteries, are his great contributions to our art.

Vesalius, a contemporary of Paré, assisted greatly the progress of our profession by his original studies in anatomy. It is perhaps fortunate for us that these two great men lived in the sixteenth century, when the spirit of the Renaissance eagerly received and disseminated knowledge. Though a Belgian, Vesalius did his great work at the University of Padua.

Now for two long centuries, till the advent of John Hunter in 1728, there was little surgical progress. Hunter demonstrated the possibilities of collateral circulation after ligature of arteries, especially in the treatment of aneurism. But it was nearly two centuries later before Post and Mott established ligature of the large arteries as a surgical procedure. Hunter was a great original investigator and experimenter, with the ability to make correct deductions from his observations. We may justly consider him the father of gross surgical pathology, as Paget, his countryman, was the father of minute surgical pathology, a hundred years later.

And so we have Hippocrates, Galen, Paré, Vesalius and Hunter standing out as great buttresses upon which the bridge of truth has spanned that dark period from early necromancy to the springtime of science. They broke away from the conventionalities and dogmas of their time, and by original thinking and investigation made for themselves a unique place in history. These great pioneer thinkers, interpreting and concentrating the learning of past ages, prepared the way for the wonderful innovations of the nineteenth century, a century remarkable for the awakening to, and establishment of, scientific methods of study.

As nations became more civilized they became more humane, at least as regards physical suffering. The terrible havoc wrought by gangrene and septicemia in military and surgical hospitals, could but arouse the highest endeavors of scientists to mitigate these evils.

There was crying need of a great discovery; and Louis Pasteur stepped upon the stage.

In an interview with Napoleon 3d, he said of his researches upon putrification—"all my ambition was to arrive at the knowledge of the cause of putrid and contagious diseases." How well his endeavors were rewarded! What an inestimable benefactor of humanity he must ever be considered. He demonstrated that it was not oxygen or any gaseous constituent of the air that produced putrification, but minute particles suspended in the air.

Very fortunate was it for our race, that there was at this time a surgeon searching anxiously for the same truth, and that he had the genius to make the practical application of Pasteur's discovery.

Sir Joseph Lister began his studies in 1860—just fifty years ago; and antiseptic surgery, the greatest boon ever bestowed upon suffering humanity, is the result. It was ten years before Lister's claims were successfully established, and fifteen more, the year 1885, before they were universally adopted.

Another great benefactor of mankind was W. S. G. Morton, a contemporary of Pasteur and Lister. He discovered anæsthesia and gave the first public demonstration of its use at the Massachusetts General Hospital October 16. 1846.

We have now traced the history of surgery in brief outline down to the last half century, when Morton the American, Pasteur the Frenchman, and Lister the Englishman, by their combined discoveries, made possible the art of modern surgery. We have *now* reached a period when sepsis and pain no longer hamper the surgeon in his work, and he may give his genius and learning full scope. Let us examine the last fifty years—a period within the lifetime of many of us—by far the most momentous period in surgical history—and see how our contemporaries have acquitted themselves. A clear view and estimate of the work of this half century may be obtained by tracing the history of the major operations, nearly all of which have been established within this time.

We will now proceed to do this, beginning with brain surgery.

Bear in mind that most of the large arteries have already been ligated, ovariectomy has been successfully performed, anæsthesia has come into its own, and Pasteur and Lister have begun those researches which are to give us aseptic surgery.

SURGERY OF THE BRAIN.

The theory of separate localization of cortical functions was first suggested about 1861, but was not established till 1873. Incessant investigation to localize these functions has been carried on ever since, and has resulted in the present status of cerebral surgery. Up to 1884 only fifty-five operations for cerebral abscess had been reported, and so late as 1889 only

eight had been operated upon successfully. By 1898 sixty successful operations for temporal, and twelve for cerebellar abscess had been reported.

Since the treatise by Sir William Macewen in 1893, operations have been numerous. No part of the brain is now sacred to the surgeon, not even the pituitary body; but from the very *nature* of the organ, new growths can rarely be removed with complete success, and only superficial abscesses offer brilliant prospects of cure.

SURGERY OF THE THYROID.

In 1864 Dr. Gross said of thyroidectomy it was "horrid butchery"; but eighteen years later he admitted its justifiability. In the first fifty years of the nineteenth century there were forty-four cases of extirpation of the thyroid reported, with a mortality of 40.9 per cent.

From 1850 to 1877 the mortality was 19 to 25 per cent., but after that there was rapid advancement in thyroidectomy, and in six years the mortality had been reduced to 7 per cent. At the present time the mortality under the best operators is from .2 per cent. (Kocher) to about 3 per cent., depending somewhat upon the method of procedure, enucleation being less dangerous than excision. Formerly the operation was only undertaken when life was endangered by pressure. Now the best authorities advise operating upon all cases that are producing symptoms, or growing, or are not responsive to medical treatment. They claim that the mortality in exophthalmic goitre is not over 5 per cent, while a cure of the disease results in 80 per cent. operated upon.

In benign goitre only a part of the gland should be removed, the stump cauterized with carbolic acid and free drainage provided to prevent thyroidism. Asepsis, conservation of the nerves and parathyroids, control of hemorrhage and thyroidism, account for the present success in thyroidectomy.

AMPUTATION OF THE BREAST. CANCER OF THE BREAST.

The first suggestion for radical operation for cancer of the breast was by Banks in 1867, when he advised removal of the pectoralis major if affected by the disease. Halstead began its routine removal in 1888, and after his favorable report in 1894 the procedure became somewhat general. The extensive dissection in removal of cancer from whatever region is based upon the anatomical distribution of the lymphatics of the region.

Previous to 1890 the best operators had recurrence in 80 per cent. of their cases. Since Halstead and Cheyne advocated a thorough removal of the lymphatic area, over 50 per cent. of cures have been reported.

Formerly the immediate mortality from amputation of the breast was 17 per cent. Now, even with our more radical operation, it is not much above 1 per cent.

SURGERY OF THE PROSTATE.

Billroth made prostatectomy in 1867. Bottini brought forward his method of galvano-cautery seven years later. Systematic perineal prostatectomy was first advocated by Goodfellow in 1890; and the suprapubic method by Fuller in 1895. The modern operator selects the method best suited to his individual case.

The Bottini, the least dangerous, is still occasionally used in the most enfeebled patients. Some operators have a predilection for the suprapubic; and others for the perineal method; while many select the higher route for the larger, softer tumors, and the lower route for the smaller and firmer ones.

The operation is giving relief and prolongation of life to a great number of hitherto hopeless and pitiable sufferers. From the very nature of these cases they are comparatively bad risks; but the mortality under such skilled operators as Young, Mayo, Fuller, Freyer and Albaron is only from 6 to 8 per cent.

SURGERY OF THE STOMACH AND DUODENUM. STOMACH.

To Mickulicz in 1880 belongs the credit of first intervention for perforating gastric ulcer, although he lost his patient. The first successful operation was by Kriege in 1892. The first operation for non-perforating gastric ulcer was by Rydygier in 1881, by resection.

In the same year the first successful gastroenterotomy and the first successful gastrectomy were performed, the former by Wölfler and the latter by Billroth.

Doyen originated the treatment of ulcer by gastroenterostomy in 1893, and this awakened great activity in stomach surgery.

The mortality of gastroenterostomies up to 1885 was 65.7 per cent. There has been great improvement since then. Moynihan has reported two hundred and six cases with a mortality of 4.3 per cent.

Robson one hundred and twelve with a mortality of 1.7 per cent.: while Mayo has reduced his mortality from 6 per cent. in his *first* series to nearly 1 per cent. in his *last*. Probably over half the cases of gastric ulcer terminate in cancer, due to prolonged irritation. This is a strong argument for early gastroenterostomies.

By the end of the year 1905, Kocher had performed one hundred and ten gastrectomies, with a mortality of 24 per cent.; but since then he has reduced his mortality to 15 per cent.

Mayo's mortality for one hundred cases up to 1908 is 14 per cent.: (He gives later statistics of two hundred and sixty-six cases operated upon between 1897 and 1910, with a mortality of 12.4 per cent. ;) but his cases in 1909 show only a mortality of 8.6 per cent.

SURGERY OF THE GALL TRACTS. GALL BLADDER.

A notable operation of 1867, was cholecystotomy by Dobs of Indiana. It was successful. J. Marion Sims repeated the feat a year later, and in ten years he had established and practically perfected the operation.

Kehr in 1900, reported four hundred and twenty-two cases with a mortality of 3.3 per cent. In 1903, Mayo reported sixty-four cases with one death; but the average mortality at this time must have been about 4 per cent.

Cholecystectomy—removal of the gall bladder—was first successfully performed by Langenbush of Berlin in 1880. The operation is more difficult and gives of course a higher mortality than cholecystotomy.

It should be the operation of choice, however, if the organ is much diseased, contracted, or its duct permanently closed. Choledochotomy—removal of a stone from the common duct—was first performed by Marcy of Boston. The credit is sometimes given to Courvoisier, who did the operation in 1890; but Marcy preceded him a year.

Cholodochotomy is more difficult and dangerous than either of the preceding operations. The mortality is about 7 per cent. At the present time all abdominal surgeons are doing successful work in this field, with a mortality probably below 6 per cent., and not only giving to many sufferers relief from pain and chronic dyspepsia, but obviating the development of cancer.

SURGERY OF THE APPENDIX.

We will consider at some length the history of appendicitis, because more than any other disease, it has led to our knowledge of the pathology, and to the successful treatment of surgical diseases of the abdomen. The first recorded case of disease of the appendix was reported in 1759; a large appendix abscess was opened, the patient dying a few days later, when autopsy revealed a corroded pin in the appendix.

Two autopsy cases in this same century showed appendix concretions. In 1812 a case of perforating appendicitis was reported in London.

The first recognition of appendicitis as a cause of death was in a paper published in France in 1813. Eleven years later another French paper first placed lesions of the appendix in a category of diseases.

Mélier in 1827 published a paper in which he spoke of *chronic* appendicitis, and suggested the possibility of surgical treatment.

Then for forty years physicians discussed disease of the right iliac fossa under the name of typhlitis, accurately describing the *symptoms* of appendicitis, but failing to give due credit to the appendix as the real *source* of the symptoms.

While the eighteenth century discussion of appendix disease was confined mostly to France and England, the first half of the nineteenth was confined almost exclusively to Germany, with the exception that Bright and Addison in England clearly stated their opinion that the *appendix* was the offender in inflammatory disease of the right iliac fossa.

A case of perforating appendicitis was reported in the United States in 1837 and another in 1838. We may justly claim that to American surgeons is largely due the present perfection in the knowledge and treatment of this disease.

The first publication upon surgical disease of the appendix was by Lewis of New York in 1856. At that time appendicitis was supposed to be due to the lodgment of some foreign body in the organ. In 1848, Hancock of London had deliberately opened an abscess in the region of the appendix, saving the patient. This, and the case reported in 1759, are the first recorded cases of operation for appendicitis. It was emergency surgery, in that it was to meet the general indication of evacuating pus wherever found, without reference to the cause.

(Since 1860 appendicitis has been considered more and more a surgical disease.) In 1867 Parker reported four operations for appendix abscesses, and he advocated operating as soon as fluctuation occurred.

This method reduced the mortality from 47 to 15 per cent.; but the cases of perforation into the general peritoneal cavity still remained hopeless. But Parker's method marked the beginning of a revolution, not only in the treatment of appendicitis, but of all surgical diseases of the abdominal cavity. As late as 1873 all the cases of peritonitis and over half the cases of circumscribed abscess were fatal. It was as late as 1880 before we disencumbered ourselves of the delusion of typhlitis. About this time, however, Tait and Noyes advocated celiotomy and drainage for perforating peritonitis of any source.

The first deliberate celiotomy for removal of the appendix was by Kronlein of Germany in 1884. The first interval appendectomy was done in London the following year. The first appendectomy in the United States was made by Hall of New York in 1886, and Marcy of Boston in the same year made the first American interval operation.

1886 is indeed an epoch year in the history of this disease. In this year Dr. Fitz of Boston published a paper, which has done more than any other writing, to bring about a right understanding of the morbid conditions of this organ.

Treves, Senn and McBurney advocated a technic in 1889, which has been but little improved. In 1905, Dr. Kelley wrote: "The aggressive surgery of the vermiform appendix as practiced to-day is only a development of the last twenty years." To-day appendectomy is the most com-

mon and successful of abdominal operations, although no other common disease presents to the surgeon such a variety of intricate and trying complications.

HERNIOTOMY.

Herniotomy is one of the few major operations of ancient times. It certainly dates back to Hippocrates and probably beyond his era. We know that Celsus in the first century operated upon non-strangulated hernia, and it is not improbable that his method included removal of the sack.

In the seventh century Paul of Aëgina advocated removal of the testis as an improvement on the operation of Celsus. None of these early surgeons operated for strangulation. In the tenth century mechanical methods supplanted operative measures. In 1831 the subcutaneous method came into vogue; but with the discovery of antiseptics the open method finally supplanted all others.

To Czerney, who about 1876 demonstrated the importance of disposing of the sack, to Bassini of Padua, to Kocher of Berne, to Macewen of Glasgow, and to Halsted and Marcy of America, for their original studies and inventive methods, the perfection of herniotomy of to-day is indebted. Statistics published in 1882 gave a mortality in non-strangulated cases of over 11 per cent. At the present time the mortality is less than 1 per cent. and with only a few failures to cure the disease.

SURGERY OF THE PELVIC ORGANS.

The conception of ovariectomy is more than one hundred years old, and is European; but its accomplishment is American. The first recorded successful case was by Ephraim McDowell, of Kentucky, in 1809. He performed thirteen ovariectomies with six deaths. In 1821 Nathan Smith operated successfully. Dr. Atlee performed the first successful ovariectomy done in Philadelphia in 1849, and was threatened with prosecution for his "Murderous operation."

Up to the middle of the nineteenth century ovariectomy was so disastrous in Germany that it was censured; but at the same time in America and England it was rapidly growing in favor through the efforts of such men as Atlee, Peaslee and Wells. Genser collected one hundred and twenty-nine cases in 1871, showing a mortality of over 50 per cent.

Dr. Storer, of Boston, performed hysterectomy in 1865. It was the twenty-fourth case placed on record and the fourth successful one.

Dr. Atlee stated in 1876 that he had performed hysterectomy over three hundred and forty times with 79 per cent. of recoveries. The management of the stump was the difficulty. It usually became infected,

causing secondary hemorrhage or fatal septicæmia. This danger was somewhat obviated by securing the stump in the abdominal wound by suture or clamp until it healed. I have myself seen Dr. Homans treat stumps in this way.

Absorbable ligatures had been suggested in general surgery as early as 1827; and it was a great advance in pelvic surgery when Marcy advocated aseptic, absorbable ligatures, in treating these ovarian and uterine stumps.

With the advent of aseptic methods the great mortality of abdominal surgery diminished like dew before the sun.

By 1885 the value of Lister's antiseptic method was quite generally accepted; but many of us remember the reluctance with which it was adopted by the older surgeons who were doing most of the operating.

Therefore, the mortality at this time must still have been about 50 per cent.

The report of the Maine General Hospital for 1885 shows seven ovariectomies with three deaths—a mortality of 42.8 per cent; and three hysterectomies with two deaths—a mortality of 66.6 per cent.

The report of 1909 (twenty-four years later) gives no mortality for simply ovariectomies and hysterectomies; but there were fifty-four ovariectomies associated with appendectomy or some other procedure, with one death—a mortality of 1.8 per cent.; and sixty-two hysterectomies, most of them associated with some other procedure, with two deaths—a mortality of 3.2 per cent.

So that we may safely claim that in this class of cases, the mortality has been reduced, in the last fifty years, from nearly 70 to about 2 per cent.

Previous to the discovery of antiseptic surgery, sepsis in some of its forms rendered futile our efforts in more than half of our cases. A compound fracture, an amputation, the invasion of a major cavity, and the chances were two to one against the life of the patient. But with the advent of antisepsis, modern surgery was conceived, hope supplanted the despondency of the sufferer, and our craft became an art. It has truthfully been said that the last thirty years have produced a more fruitful harvest to mankind than the preceding thirty centuries.

What of the future of Surgery? Who has the temerity to prophesy? Paré, in 1575, had the temerity. This is what he wrote:

“And in this labor (to throw light on surgery), I have striven so hard to obtain my end, that the ancients have naught wherein to excel us, save the discoveries of first principles; and posterity will not be able to surpass us, save by some additions such as are easily made to things already discovered.”

He never dreamed of the possibility of such discoveries as the microscope, bacteriology, antiseptis, anæsthesia, and the revolution they would produce upon the science of his day. And so we, heeding the teachings of history, should sound a note of hope, rather than of finished achievement; an optimistic belief that diseases, which *now* baffle our skill will soon be vanquished by new knowledge.

It is not probable that Surgery will receive much aid from new discoveries in anatomy; but we may hope for much assistance from advances in physiology, pathology, laboratory investigations, antitoxine, serum, and vaccine therapy. It is probable too, that new discoveries will re-classify our diseases, so that some now helpless as medical, may become curable as surgical; and that others, like exophthalmic goitre, and cancer, now submitted to surgical treatment, may become more amenable to medical.

And here I would affirm of medicine, that although its progress has been less spectacular than that of surgery, it has, nevertheless, kept well abreast of surgical advancement, especially in the control of contagious diseases; but until preventable diseases shall have become mere history, and until the period of old age shall have been advanced some decades, there is abundant opportunity for those who would write their names among the benefactors of mankind.

I wish here also to state my conviction that the general practitioner needs as ripe judgment, astute diagnostic power, and a broader and deeper knowledge than the surgeon; for it is the physician, usually, who first sees the case before it is well developed; and the responsibility is upon him to determine if it may need operating, before it is too late for the most successful intervention of the surgeon.

How can we personally add to the knowledge of our profession? There is no open sesame to such knowledge. Incessant toil is the only talisman that unlocks the deeper secrets of the universe. There are two channels by which medical knowledge has come to us in the past—scientific investigation, and clinical experimenting and observation.

Scientific investigation requires not only such opportunities as are alone afforded by the great universities or personal wealth, but a peculiar mind and fundamental training. These requirements are beyond most of us; but we all can record our experiments and clinical observations, and learn to reason from them to a logical conclusion, and thus add our mite to the rapidly growing mountain of knowledge from whose summit our successors shall look forth upon that utopian period when cancer, tuberculosis, diabetes and microbic infection shall be as subject to our skill as are the preventable diseases and appendicitis to-day.

Gentlemen, we are the true philanthropists of the twentieth century. By incessant and unselfish efforts our profession is fast destroying its own

source of livelihood; but it is at the same time banishing from the world those dreadful scourges that formerly decimated the population. And our profession stands to-day more truly than ever before, a Perseus delivering humanity wherever, like Andromeda, she lies *helpless*, before that hydra-headed monster, disease.

INVERSION OF THE UTERUS.

BY J. D. LAWSON, M. D., OF ST. STEPHEN, N. B.

(Read before the Washington County Society.)

In the condition of inversion, the uterus is turned inside out—complete or partial. It is an invagination of the fundus into or through the cavity of the womb. The inverted fundus and body of the uterus is lying within the vagina or is protruding from the vulva. When complete, its peritoneal surface is converted into a cup-shaped hollow; its mucous membrane becomes everted, so as to lie exposed on all sides in the cervix and vagina.

Inversion may be acute or chronic. Happening at parturition, acute or puerperal inversion belongs to the obstetrician.

Chronic is in the non-pregnant uterus: usually secondary to uterine tumors, and belongs to the gynecologist.

CAUSES OF INVERSION.

When speaking of the acute condition or puerperal inversion, Hart and Barbour of Edinburgh, in their text-book say: "Its former frequency was due to improper management of the third stage of labor." "When the uterus was flabby and not contracting and the placenta not coming away, the removal of the placenta by traction on the cord drew down part of the wall to which it was attached and thus inverted the uterus." This is a very common idea, but it is altogether too dogmatic a statement, and the very statement carries its own contradiction. "When the uterus is flabby and not contracting" is, itself, an indication that the preponderating causes are predisposing and not immediate.

In the puerperal condition, the uterus is enlarged and the walls softened by the ordinary evolutionary changes of pregnancy. Granted a fundal implantation of the placenta, the involuntary efforts of the uterus to expel it might cause the fundus to be dragged down, and a beginning may be enough—under the mechanical conditions.

Manual expression of the placenta—a faulty application of Crede's method—(because Crede's method is not pressure on the uterus but com-

pression of the uterus) along with traction on the cord no doubt contribute to inversion, but only in a uterus predisposed to it. E. G. In a case of breech presentation, my assistant used such vigorous pressure to expel the head that I felt sure he would drive everything into the world, but it did not—nothing happened.

Anemia, uterine inertia, with slow delivery, on the one hand, and on the other strong and precipitate labors, excessive amniotic fluid, and hemorrhage, predispose to the accident. The common condition produced by these diverse causes is, irregular uterine contraction, some of the fibres being relaxed while others act strongly, the firmer parts being drawn through the relaxed.

From a study of the conditions I have come to the conclusion that the occurrence of inversion should by no means bring any aspersion on the skill of the attendant. Similar conditions may be present in any one case and yet no inversion.

FREQUENCY.

Braun's records on the continent of Europe show not one case of complete inversion of the uterus in 250,000 births.

In the Rotunda Lying-in Hospital of Dublin only once in 191,000. Other observers are inclined to place it as much more frequent.

In the American Journal of Obstetrics for March, 1910, in the report of the meeting of December, 1909, of the New York Obstetrical Society, Dr. Charles Clifford Barrows presented the history of a case. In the discussion, Dr. Dorman told of a case he had had six months previously.

Dr. Edgar had met another case, which he felt sure had been caused by too vigorous application of Crede's method.

Dr. Vineberg told of a case six years previously, where the patient was brought to Mt. Sinai Hospital 12 or 14 days after delivery, with what was supposed to be a fibroid tumor, but which really was a complete inversion of the uterus.

Dr. Robert L. Dickinson, the chairman of that meeting, wished to record a case of his.

The late Dr. Deacon had a case of complete puerperal inversion.

I have had one case acute and one case chronic. In the circle of my social acquaintance I know of another case.

In the discussion on this subject at the Maritime Medical Association at St. John, N. B., July, 1910, it was surprising to see how many present had met with this condition, either in their own practice or in consultation. So when investigation is made it seems as if the idea of former frequency does not hold.

With regard to prognosis I quote from Barnes' Obstetrics:

(1) The patient almost immediately or soon after the accident dies from pure shock.

(2) Most frequently death occurs rapidly from shock and hemorrhage combined, that is within 12 hours.

(3) In some cases, and these not rare, the shock and hemorrhage are not very severe, or, at all events, the woman survives the immediate effects, rallies and is thought to be safe

Crosse has studied the history of 400 cases and places the mortality at 35 per cent.; death occurring very soon after the accident or within a month. Of 109 fatal cases, 72 died within a few hours, most of them in half an hour; 8 died in from 1 to 7 days, 6 in from 1 to 4 weeks. After the first month the danger is slight.

Of 120 recent cases reported by Crompton in the American Journal of Obstetrics in 1885, 87 recovered, 32 died, and 1 was unrelieved. Of the 5 cases mentioned at that meeting of the New York Obstetrical Society, December, 1909, only one died. Dr. Deacon's case lived and was apparently not affected. My case also lived.

DIAGNOSIS.

Chronic inversion must be diagnosed by bimanual examination and the sound, preferably under anæsthesia.

Differential diagnosis is from—

1. Polypus in the vagina, simple, or with adherent pedicle.
2. Intra-uterine polypus.
3. Uterine polypus with partial inversion.
4. Prolapsus uteri.
5. Inversion with prolapse.

These various conditions will present themselves to the mind of the examiner at the time.

In the diagnosis of the acute inversion, the symptoms are chiefly those of shock, indicating sudden, severe injury. The amount of inversion is usually indicated by the severity of the symptoms. When the inversion is complete, a large mass will be present at the vulva or protrude beyond. An abdominal examination will show the absence of a fundus.

MY EXPERIENCE WITH CHRONIC INVERSION.

I was called to a patient having uterine hemorrhage. I found a much enlarged uterus, quite high above the pubis, about what one usually finds in a four or five months pregnancy.

I suspected the oncoming of a miscarriage. After two or three visits patient was a little better, and I was dismissed until sent for. Several

weeks passed and I was called again for hemorrhage. I found the vagina full, and at first was confident of the miscarriage, but on a closer examination I was puzzled. I had found a condition new to me, vagina full, no cervix, no os, but nothing above the pubis. She could not allow a thorough examination. She was having recurrent hemorrhages, at times very severe. She was very anemic. I had a consultation, but nothing definite was decided on. After repeated urgings she went into our hospital, where we had an examination under ether, with a consultation of the general staff. The condition was apparently a puzzler to all there, and it was certainly above and beyond me. The hospital record made at the time by me is: "Diagnosis—Inversion of the uterus, complicated with fibroid." She was sent home, nothing done. My intention was to take her to a gynecologist. She was poor, and before the funds were collected the case was put into Dr. Deacon's care, (for some reason he had not been present at the general consultation.) She was taken to our hospital again. After waiting and watching judiciously, the doctor removed the fibroid. She improved; was able, after a long time, to be about the house, and although a burden to herself, assisting in the household work.

A year or so later she sent for me for hemorrhage, which was not so severe as on the previous occasions.

On examination found the local conditions about the same to the touch as they had been before. I had her again taken to the hospital and had Dr. Deacon in consultation. He examined and hesitated. He conversed and he corresponded with several surgeons and gynecologists and concluded to leave her alone, unless there arose some very special urgency. She is now in fair health—able to be about the house, but unrelieved and feels a burden to herself.

In this case we find one of the results of chronic inversion, namely, toleration.

Spontaneous reinversion and cure has been observed, but is a rare occurrence and is to be regarded as a gynecological curiosity rather than a natural termination.

With reposition of chronic inversion I have had no experience and will not weary you with quotations from books.

My case of acute or puerperal inversion happened while the chronic case was fresh in my memory "between heats." It was in a primipara under 30 years of age, fair complexion, nothing abnormal in history or condition. Progress had been slow, but steady, and after the head had been resting on the perineum for more than an hour without progress, I used the forceps. Had the usual unskilled help and got along without anything unusual. The following, taken from the record written at the time, speaks for itself:

"After about ten minutes from the birth of the child, found the uterus hard and small and low down. On making slight traction on the cord with the fingers of my right hand "working" the placenta from behind the pubic bone, the placenta came down with a rush. The mass came out beyond the vulva. I thought it might be a second fetus! I pierced the placenta and found the fundus of the uterus—the membranes adherent to the lower or cervical zone of the uterus and had to peel them off. I allowed the uterus to remain outside a few minutes, as the pulse and condition of the patient was good. When symptoms of shock began, I replaced the uterus by direct force."

Just as soon as the mass appeared at the vulva, I sent out for assistance. I peeled off the membranes and they came off quite easily.

Knowing the toleration of my chronic case, and the pulse and condition of the patient continuing virtually normal, I allowed the uterus to remain outside. But when the pulse began to change I replaced the uterus by direct pressure. It seemed to go back easily, no special hemorrhage, but the symptoms of shock were very great. My written record stops but memory is very distinct in what followed. I at once gave a subcutaneous injection of saline solution under the breast. Fortunately I had my needle with me for attachment to the fountain syringe, (and I have never been without it since). Gave a hypodermic of strychnine and a dose of ergot by mouth. When assistance came, the condition of shock still continuing, gave more saline—subcutaneous and rectal. She rallied and lived—had a long, tedious recovery. I attended her for more than a month. When I last saw her the vagina was very loose and lax and the uterus remained heavy and subinvolved. She had a number of Job's comforters, who told her that if she had had the proper care and right treatment at her confinement she would have been well long ago. She passed into Dr. Deacon's hands. A year or so afterwards I asked him about her. He told me he wanted to do a ventrofixation but she would not consent. Then it was I told him what she had been through, and he told me of his case of inversion. I feel certain, if my mind had not been drawn to inversion of the uterus by that previous chronic case, this peculiar, sudden, unlooked-for, alarming case of acute inversion would have had a different ending.

A small erosion of the trachea may give rise to a distressing hemoptysis which differs from a hemorrhage from the lungs in that there are no lung symptoms, no loss of weight or constitutional symptoms and in that the bleeding occurs in small lumps of clotted blood.

[*American Journal of Surgery.*]

Necrology.

DANIEL HUGH KELLEY.

Daniel Hugh Kelley, a skillful practitioner in Oldtown, Maine, was born in Milford, Maine, in 1865, but moved early with his parents to Bangor. He was educated at private schools in Baltimore, Quebec and Toronto, studied for a while with Dr. Hennessy, of Bangor, and finally obtained his degree of M. D. from the University of Vermont in 1881. He practiced in Mattawamkeag from that time until 1902, when he removed to Oldtown, where he died August 28, 1907.

He belonged to the County, State and National Medical Associations, but was of a quiet and retiring disposition, publicly. He possessed a large fund of anecdotes, and with them cheered his patients. He was a physician out and out, and did no surgery except in the minor branches and in emergencies. He served long as Pension Examiner in his district, and gave much satisfaction in that office; difficult to fill. He was of a kind disposition; his first thought was to relieve pain; and in his practice he made many personal sacrifices for the preservation of the health and lives of his patients.

Whilst writing this notice (too long delayed) of a genial member of this Association, a patient told me this anecdote, characteristic of the conservative character of Dr. Kelley: "My husband when a boy had the misfortune to injure his right hand, and two physicians advised an amputation because the hand could not be saved, except possibly by long continued treatment. Dr. Kelley's advice was asked and he said: 'This boy is a poor boy, and he will have to make his way of himself in the world with his right hand. It is our duty, then, to try to save it, and if we do this and that, we may accomplish our aim.' His advice was followed and my husband has made more than the ordinary living of a day laborer, thanks to good Dr. Kelley."

Dr. Kelley is survived by an admiring wife, whose maiden name was Sarah Elizabeth McCryshal, and a daughter, who lament him as one who died too early, but had already done much good to those with whom he practiced and lived.

J. A. S.

HORACE FRANKLIN HANSON.

Horace Franklin Hanson, a practitioner of Bangor, Maine, was born in 1837 in Harrison and died at his home in Bangor, July 17, 1910, aged 72. He originated from a Quaker family of Lee, Maine, and was educated

at the Normal School near by. At the outbreak of the civil war, he arose from bed and a severe attack of the measles and enlisted for his country, serving for three years in the Third Maine Infantry Regiment and doing good service during many battles of the three years of war. When his term was ended he studied medicine and was graduated at the Berkshire Medical School in Western Massachusetts.

He practiced first in Burlington, then in Amherst, then took a post-graduate course at the Long Island Hospital Medical School, and settled in Bangor being at one time medical partner with the well known late Calvin Seavey, A. M., M. D.

Dr. Hanson finally struck out for himself, and although a member of the County and State Medical Societies, he remained always a very reserved and very conservative man. He mingled very little with the other members of the medical profession, practiced very quietly, and seemed to act as if, owing to his services in the war, and from his length of experience and practice he ought to have the first chance at every patient in the city.

He wrote one or two papers of medical interest for the Penobscot County Medical Society, of which he was in succession Secretary, Treasurer and President, but contributed little of permanent value to the discussions of our Association.

J. A. S.

TIMOTHY D. SULLIVAN.

Timothy D. Sullivan, once a resident of Portland and later on of Calais, Maine, having practiced in both cities a number of years died at Calais, Thursday, August 31, 1910. He had long been a sufferer from cardiac disease, so that it was a wonder that he had not long before succumbed. He was born in Castle Island, County Kerry, in Ireland, came to New York as a boy and worked as clerk in a hotel in the metropolis. He studied medicine at Bellevue Medical College and at the Medical School of Maine and obtained his degree in 1884. He practiced medicine for a while in Biddeford, Maine, then entered upon special studies in diseases of the eye and ear at the Maine Eye and Ear Infirmary, and practiced that specialty in Portland. Later on he continued in the same specialty, practicing in Calais, where he died.

Dr. Sullivan was a curious man in his ways and conversation, and inclined to eccentricities of manner, which made him a marked man in the profession which he successfully prosecuted many years.

He is survived by a widow and three children.

I do not find that he contributed papers on medicine to any special journals, but for local societies he did considerable work in that line.

J. A. S.

JOURNAL OF MAINE MEDICAL ASSOCIATION.

DR. FRANK Y. GILBERT, EDITOR.

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DR. ADELBERT MILLETT, Belfast.

DR. A. W. FOSS, Rockland.

DR. W. N. MINER, Calais.

DR. D. E. DOLLOFF, Biddeford

Editorial Comment.

The Laborer is Worthy of his Hire.

Dr. Wiley has apparently triumphed over his enemies. At any rate he has not received "condign punishment" for being party to a scheme to pay proper compensation to a scientific expert whose services were desired by the Bureau of Chemistry.

The more the matter is examined, the more absurd the charge becomes.

Attorney General Wickersham, who objected to paying Dr. Rusby \$20.00 per day, found no difficulty in paying the legal experts employed by his Department in the Trust-busting cases, \$166.00 per day.

Other legal experts, while working for the Government, have received \$50,000.00 and even \$80,000.00 per year and \$50.00 per day while giving evidence in court.

If it was possible to pay such compensation to a legal expert, why was it impossible to pay \$20.00 per day to a scientific expert?

The fact is that for many years an exaggerated emphasis has been placed in this country upon the services which the legal profession render to the community.

Congress is largely in the hands of lawyers, and in consequence legal matters receive a more sympathetic handling than those which pertain to science. But even so, Congress cannot afford to ignore what it eats, any more than the country at large can.

Hence it is gratifying to learn that the President, himself a lawyer, has a larger vision than apparently his Attorney General has, for in his decision with regard to this matter, he says: "Here is the pure food act,

which it is of the highest importance to enforce, and in respect to which the interests opposed to its enforcement are likely to have all the money at their command needed to secure the most effective expert evidence. The Government ought not to be at a disadvantage in this regard, and one cannot withhold one's sympathy with an earnest effort by Dr. Wiley to pay proper compensation and secure expert assistance in the enforcement of so important a statute, certainly in the beginning, when the questions arising under it are of capital importance to the public."

If the question of what an expert should be paid while serving the Government rests with Congress rather than with the Departments, it is high time that an enabling law should be passed to pay scientific experts proper compensation.

C. R. B.

Finances.

The question frequently arises relative to the cost of running the Journal and Maine Medical Library. The State Association provided eleven hundred dollars this year for this purpose, leaving the remainder to be supplied through the advertising columns. This could be very easily accomplished if the majority of the members of the State Association will do their part.

All reputable drug concerns are dependent upon the physician for their share of business and we are all quite familiar with the detail man's casual look into the door, leaving a lot of samples on your front porch and later receiving a courteous word of thanks from the drug concern for our kind treatment of the representative whose smiling countenance we did not have the opportunity to gaze upon. If a concern can afford to continue this method of advertising they could very well afford to carry a two or three page ad. in the State Medical Journal. We do not, however, ask or expect any other than they should carry some small ad. in proportion to what they felt they could afford.

If each physician would notify the representatives of the drug houses that until such a time as their ads. appeared in the State Medical Journal they would not desire to do business with them, it would be a very short time before the Journal would be self-supporting and saving money to the Association. It is surely well worthy of consideration and a very simple way in which each of us could be of great aid in continuing the objects of the Journal.

Co-operation of the County Society.

Among the main objects of instituting the State Journal was a closer relationship between the County Societies, in that interesting papers with their discussions, case reports and personal items of each County would be reported through the columns of the Journal each month to the members of the other County Societies. This would give any member of the State Association who is at all interested in the co-operative organization work an opportunity to know which County is doing the most active work and just what men in that County are most active along lines of progress; in other words, each month should give us a pretty good idea of the activities of one or more Counties. In order to be of the greatest possible value the reports from the County Societies should be as complete as possible.

It is not always the fault of the County Secretary and Editor in not accomplishing this result. If each member of the County Society would take upon himself as a special duty to inquire into the reasons why such reports did not appear in the following issue of the Journal and endeavor to correct future reports, there could be no question but that we would have a large mass of most interesting material each month, making the Journal of utmost value along lines suggested and accomplishing one of the great objects in its foundation.

Another object was the instituting of a State Medical Library that would place for the physicians of the State an opportunity for consulting various reference works appearing both in book and Journal form. An editorial of last issue reviews the present status of this library with the exception that we have just received word that the Maine Medical Library was on the mailing list for the Reports of the Bureau of Labor, Department of Agriculture and the Government Laboratories in Manila.

It can be readily seen that two of the most important objects in starting the State Medical Journal are gradually being accomplished and it only requires patience and perseverance on the part of the Editorial Staff, together with the support and co-operation of the entire membership of the Association.

These should increase the value to membership in the State and County Societies and ought to be an added inducement to obtain new members. Let us all work for an increase of members of one or two hundred more before the State meeting in June.

Some Problems to be Faced.

During the past few years each state has been battling with the problems relative to medical charities, medical legislation, public health matters

and the carrying of some method of protection for individual members in suits of malpractice. The State of Maine has been decidedly remiss on most of these questions, taking them up only as they have become a menace, and so handling them at a disadvantage, only to drop them afterwards. The State Associations each year have appointed committees in these various fields of work. These committees have reported each year on the work done, together with the recommendation or resolutions as they may deem wise, only to have them accepted and referred to the publication committee without definite action.

The majority of these reports show that the members of the committees have devoted considerable time in investigating these questions, and it is a regrettable fact that some more definite way has not been devised for handling these important subjects. Medical charities has become one of the greatest economic questions that the medical profession and public of to-day has to face, and nearly all of our larger cities are working along lines of regulation of their various charitable institutions. The fact that all medical institutions were founded by medical men and can only be continued through co-operation with the medical profession makes it seem strange that such a question should ever rise, nevertheless, in all the large cities, the patients going to our charitable institutions are not charitable patients. The question of lodge practice is even a greater problem, and more particularly that the lodges are paying but a small amount each year for an unlimited medical and surgical service.

These questions are being worked out by degrees, and from time to time we shall receive reports from various sources of investigation. The State of Maine with 1,200 physicians ought to be able to take these problems and settle them definitely. However, they should be taken up cautiously, and treated as economic questions in their relation to the public and to the medical profession.

As to the question of some method of protecting members from malpractice suits, some twenty states now have some form of protection, according to a letter from Dr. Frederick Green of Chicago. This can be accomplished by an extra assessment of two dollars a year, this sum to be devoted exclusively to paying a reasonable amount as retainer to some competent attorney, who will stand ready to defend any member from any case of malpractice. We are all familiar with the fact that most cases are brought as a form of black mail, and that if the attorney for the plaintiff once realizes that the attorney for the defendant is thoroughly competent along the lines of defence of these cases, the chances are that he would never let the case go to court, and that comparatively few would ever go into the Law Court. The details of such a form of protection can be worked out later if thought best by the individual members.

A thorough campaign should be carried on this year on the questions of medical legislation, so that each County Society will have had an opportunity to discuss and decide on some definite method of approaching this question before it becomes a live issue in our next legislature. We are now endeavoring to obtain all necessary data from other states in regard to their method of handling these questions, also reports of committees on investigation, and hope later to make reports on the same. The Journal has made note in previous editorials of the importance of eliminating our health boards from politics and the wisdom of securing health experts in each community. At the present time, the individual members of the health boards of each community are struggling without any active co-operation of the medical profession, and trying to better conditions. These problems are necessarily medical and should be dealt with by the profession at large. These are but few of the many questions that should be thrashed out by the profession of Maine, none of which should be settled without careful study.

A movement is now on foot whereby all data that can be possibly obtained on the above subjects will be submitted to a committee composed of one representative from each County Society. This committee to take these questions under consideration at a meeting in January or February and make due report back to their respective County Societies on all suggestions and recommendations of this committee. The County Society will then have an opportunity to discuss these matters among themselves and alter or make resolutions as they may see fit, so that at a subsequent meeting of the committee they will have as nearly as possible a true sentiment of the medical profession of the state and can then make definite recommendations for action at the state meeting in June. Seven counties have already appointed delegates on this committee and it is hoped that by the middle of December every county will be represented.

In this way, each County Society will be called upon to consider these questions once or twice previously to the state meeting, and it is sincerely hoped that all data presented at this time will be carefully considered and any action taken will represent a careful and matured judgment of all members, as these problems should receive only a fair and impartial solution to be at all effective, while their solution will depend wholly upon the co-operation of the profession of our state.

County News.

CUMBERLAND.

• CUMBERLAND COUNTY MEDICAL SOCIETY.

The regular quarterly meeting of the Cumberland County Medical Society was held at the Congress Square Hotel, Friday evening, October the 27th at 8 o'clock.

The paper was read by Dr. John T. Bottomley, of Boston, and his subject was Jaundice.

A Dutch Lunch was served following the paper.

PHILIP P. THOMPSON, *Secretary*.

PORTLAND MEDICAL CLUB.

The regular monthly meeting of the Portland Medical Club was held at the Columbia Hotel, Thursday evening, October 5th. There were thirty-two members present.

Three applications for membership were received and referred to the Board of Censors.

Two interesting cases of Laminectomy were reported by Drs. Twitchell and Williamson. Dr. Williamson also reported a case of Perforation of the Duodenum from a peptic ulcer, with operation and recovery.

The paper of the evening was delivered by Dr. Eliza Ransom, of Boston, on "The Corset in Health and Disease." After emphasizing the necessity for each woman to wear corsets adapted to her individual needs, she explained fully the advantages of the Boston Hygienic corset as particularly good for all cases. Her paper was followed by a demonstration of these corsets on living models, by which the application and advantages were shown.

The meeting was adjourned.

HAROLD EVERETT, *Secretary*.

WESTBROOK MEDICAL CLUB.

The Westbrook Medical Club held its first meeting of the season at the home of its Secretary, Dr. F. L. Ferren.

The meeting was called to order by its President, Dr. L. L. Hills, and officers for the ensuing year elected. Those elected were: President, Dr. Charles F. Haynes; Vice President, Dr. F. Barrett; Dr. F. L. Ferren was re-elected Secretary and Treasurer.

The paper of the evening was to be presented by Dr. F. Y. Gilbert, of

Portland. But owing to the sudden illness of Dr. Gilbert the paper was postponed until our next meeting in November.

As usual, our poetical brother Dr. Charles F. Haynes, of Gorham, was present, who very kindly consented to give us some readings from some of his poetical sketches. Following is one of his poems read at this time:

THE MISSIN' LINK.

“Och, Patsy dear, an’ phat d’ye think?
They say they’ve found the missin’ link—
The ’pindix end of a moonkey’s tail
Insoide av us that makes us ail:
Which they cuts out be gorra moightys
To save us havin’ paritonoitis.
Some moonkies for some penal sin
Had had their tails all dhriven in
Which changed thim to a better breed
That had for tails no further need,
So every woman, man and child
By moonkies tails are now defiled.
And that’s the cause (the dochters say ’tis)
Av phat they calls appendisates.
Since phat they say is true no doubt
We’ bether go and have ’em out.
For I am killed just when I think
That I have got the Missin’ link.”
“Whist, Biddy dear don’t tell me that,
They’re guyin’ ye” responded Pat.
If phat they say took place at all
It was before old Adam’s Fall.
Now phat I know I’m goin’ to tell
About some things that then befell:
Some moonkies fat as they could be
Once hung on our ancestral tree.
Thin lazy divils grew that stout
When hangin’ down their tails pulled out,
Thin off they ran from them that had ’em
And went to shakin’ hands wid Adam.
They grew to be in ivery way
Loike min and women day by day.
Some wint to Nod as I’ll explain,
Where one became the wife of Cain.
That this was true I wouldn’t swear
Because you know I wasn’t there;
This solves the puzzle av me loife,
How else could Cain have found a woife
Wid divil a woman to be found
Exceptin’ Eve the world around.
Cain married there some one or other,
It couldn’t sure have been his mother.
If there you’ll go in soorch I think

You'll surely find the Missin' Link.
Some German Scholars say they trace
Us backward to the moonkey race.
We see some people now and then
Look more like moonkies than loike men.
But 'man's a man for all o' that '
D'ye moind that now?" said knowing Pat.
"Thim moonkies' tails all turned to snakes
I've seen thim when I had the shakes.
In Aiden 'twas they raised 'high jinks '
The divil take the missin' links!"
"Och, Patsy dear, but aint ye kind?
Phat ye have said relaves me mind.
Those moonkies' tails no more I'll fear,
They've beaten mine to frazzles dear."

DR. CHARLES F. HAYNES.

ANDROSCOGGIN.

The regular meeting of the Androscoggin County Society was held in Lewiston on the 3d of October. After the regular business session, the Society listened to a very interesting and instructive paper on "Cæserean Section," with case reports by Dr. Stanley P. Warren, of Portland. Dr. Warren also spoke at some length as President of the Maine Medical Association.

The question of a committee composed of a member of each component Society was taken up and the resolutions submitted were adopted. Dr. E. S. Cummings was appointed as representative of Androscoggin County. This committee is to take up various matters of vital interest to the profession.

Then Dr. F. Y. Gilbert, of Portland, read a paper on "Ocular and Nasal Headaches," demonstrating the close relationship between ocular and nasal excessory sinus diseases. After a brief discussion the meeting adjourned in time for the out of town members to get the night trains home.

J. W. SCANNELL, *Secretary*.

KENNEBEC.

The regular meeting of the Kennebec County Medical Society was held at Hotel North, Augusta, Friday evening, October 20th, at 7.00 o'clock P. M. There was an attendance of about thirty members.

The President of the Maine Medical Association, Dr. Stanley P. War-

ren, was present and addressed the Society on the advisability of appointing a committee from the Society to meet with other delegates from the other County Societies and discuss the problems which have been presented at the various County Societies during the year, Associated Medical Charities, the advisability of the establishment of a Protective Insurance by the State Association and various other matters of interest.

A paper was read by Dr. Samuel Robinson, of Boston, upon the "Surgical Treatment of Certain Thoracic Diseases." A very able paper, which presented the subject from a standpoint of advanced surgery and therapeutics.

Meeting adjourned.

WELLINGTON JOHNSON, *Secretary*.

WATERVILLE CLINICAL SOCIETY.

The October meeting of the Waterville Clinical Society was held at Bay View Hotel on Monday evening, October 23d, followed by a banquet.

Paper of the evening by Dr. E. P. Fish. Subject, "A Consideration of Some Therapeutic Measures in Diseases of the Heart."

EDSON E. GOODRICH, *Secretary*.

KNOX.

The last regular meeting of the Knox County Medical Society was held at Rockland October 10th. An interesting paper on "Peptic Ulcer" was read by Dr. M. J. O'Connor. This was followed by a general discussion.

A resolution was adopted by the Society to appoint one member to meet with representatives from the other County Societies to take action on matters of general interest to the profession of the state. Dr. W. F. Hart was elected as a representative of this Society. The meeting was followed by a dinner at the Thorndike Hotel.

A. W. Foss, *Secretary*.

PENOBSCOT.

The October meeting of the Penobscot County Society was held on Tuesday evening, October 7th, at the Bangor House, Bangor.

Matters of general interest to the Society were considered, after which the President of the Maine Medical Association, Dr. Stanley P. Warren, of Portland, addressed the Society.

After a very enjoyable banquet, Dr. Mason presented a paper on "Reminiscences of the Bangor Physicians," giving a historical sketch of

the life and work of the earlier physicians of that city who had been practitioners there up to 1850. The paper was illustrated with anecdotes of the every day work of some of those old time physicians. At the conclusion of the paper, the President called upon Dr. Simmons, Dr. Robinson, and others, who continued the story as given by Dr. Mason in his paper.

The meeting was thoroughly enjoyed by all, and a very pleasant evening was spent.

JOHN B. THOMPSON, *Secretary*.

SAGADAHOC.

The regular meeting of the Sagadahoc County Society was held at New Meadow's Inn. After the usually fine shore dinner that the Inn is noted for, the members and guests settled down for a brief business session. Dr. Warren was called upon for remarks as President of the State Medical Society and spoke at some length concerning the coming meeting at Portland. Dr. Gilbert, of Portland, took up matters pertaining to the Journal and Library work, also submitted resolutions calling for the formation of a State Committee to be composed of a member of each component Society to investigate matters pertaining to medical charities, protective insurance, etc.

By a vote of the meeting resolutions were adopted, and Dr. Marston was appointed as a member of the committee.

Dr. Warren then presented a very interesting paper on "Cæsarean Section," with case reports. After a lengthy and general discussion and a vote of thanks to Dr. Warren, the meeting adjourned.

R. C. HANNEGAN, *Secretary*.

WALDO.

The Waldo County Medical Society held a meeting in the Municipal Court Room, Memorial Building, Belfast, Maine, on Friday evening September 22, 1911, there being a good attendance.

Dr. Stanley P. Warren, of Portland, President of the Maine Medical Association, was present, and read a paper on "Cæsarean Section—a Personal Experience with Sixteen Cases," which was of much interest and called forth many questions.

Dr. B. P. Hurd, of Waterville, gave a demonstration of the cystoscope.

Dr. G. C. Kilgore, of Belfast, presented a clinical case.

Dr. Warren gave a short talk on State Association matters.

Dr. O. S. Vickery, of Belfast, tendered the Society a banquet.

ADELBERT MILLETT, *Secretary*.

YORK.

The 66th quarterly meeting of the York County Medical Society was held at the Common Council Room, City Building, Biddeford, Maine. Meeting called to order at 11:45 o'clock. President F. E. Small in the chair. Reading of the minutes of the last meeting. Report accepted.

Application of Dr. L. W. Carpenter, of Limerick, referred to the Society by the Board of Censors, with a favorable recommendation. He was elected a member of the Society.

Reading of the Secretary's report.

Reading of the application of Dr. B. M. Moulton, of Sanford and Dr. W. H. Kelley, of Sanford. Voted to refer to Board of Censors.

Reading of letter of Dr. E. M. Varney, of West Buxton, requesting release from this society with permission to join Cumberland. Permission voted.

Letter from the Editor of the Journal of the Maine Medical Association read by the Secretary concerning a resolution which was also read.

Remarks by the State President, Dr. Stanley P. Warren, on increasing membership of County Societies; changes in the State Meeting to make it more interesting, and a further elaboration of the ideas in Dr. Gilbert's letter. Why we should have a State committee made up of a member of each Society. Why a report of this committee should be made to the House of Delegates. Instances cited of the abuse of Medical Charities. The question of Protection and Mutual Benefit, and of Health Boards. The Journal, its organization. There should be a salary for the Editor. Shall the work be continued?

There should be a member of the State Committee from each Society to meet in a central place, report on the doings of the committee each to his own Society, which then acts and will be ready to act through its delegates to the State Meeting. Further remarks by Dr. Thompson on Medical Charities.

Moved and seconded that a delegate be appointed by the President to represent the Society on the State Committee. So voted.

Adjourned till after dinner.

An enjoyable dinner was served at Hotel Thacher.

P. M. Session. Dr. Thomas F. Conneen, of Portland, introduced and read a very interesting paper on "The Hyperasthenic Back." Received with applause. Discussion opened by Dr. Randall, continued by Drs. Purington, Thompson and Warren. Discussion closed by Dr. Conneen. Remarks made by Dr. O'Neil on the discouraging of law suits. Remarks also by Drs. Thompson and Warren.

Dr. D. E. Dolloff appointed a member of the State Committee by the County Society.

Unanimous vote of thanks given Drs. Conneen and Warren.

Adjourned.

Members present: Drs. Small, Randall, Cook, Jones, Thompson, Kendall, Precourt, Maynard, Purington, O'Neill, Prescott, Traynor, Dolloff.

D. E. DOLLOFF, *Secretary*.

PERSONAL NEWS AND NOTES.

Dr. Clarence R. Simmons has moved from Lincolnville Center to Searsmont having bought the house of Dr. A. Millett, who has taken up his residence in Belfast.

Dr. B. P. Hurd, formerly of Thorndike, has moved to Waterville and will limit his practice to genito-urinary work.

Dr. Moran has returned to his work after a few weeks' spent in Europe.

Dr. A. W. Haskell has given up his general practice and gone to New York for the purpose of studying diseases of the eye, ear, nose and throat.

The Maine Medical School at Brunswick has opened and the entering class is larger than for some years, although the exact number has not been fully determined.

Dr. George Cook, of Concord, N. H., is in town for a few days, attending a church convention.

Dr. Ferren, of Westbrook, who was called away on account of the illness of his father, has returned and resumed his practice.

Owing to a severe attack of iritis, Dr. Frank Y. Gilbert has had to give up all his work, leaving the Journal work in the hands of Drs. C. R. Burr, H. E. Milliken and Philip P. Thompson. He expects to be away until the middle of November, and communications relative to the Journal wanting prompt reply should be addressed to Dr. C. R. Burr, 130 Park St., Portland, Me.

Universal regret is being extended to Dr. E. H. Gehring, who has recently lost his infant son.

Dr. S. D. Little, of Caribou, has removed to Phoenix, Arizona.

Dr. H. F. Kalloch, of Waterville, has been visiting in Fort Fairfield the past week.

Dr. F. H. Jackson, of Houlton, has returned from a successful hunting trip, getting all the law allows.

Dr. D. J. Bell, formerly of Yukon, has been practicing at Fort Fairfield during the summer, but on account of his wife's health they have gone back to Vancouver.

JOURNAL REVIEWS.

(Surgery, Gynecology and Obstetrics, July, 1911.)

Diagnosis and Treatment of "Contracted Pelves." By J. M. Munro Kerr, M. D., Glasgow, Scotland.

After stating the impossibility of accurately measuring the pelvis by any known method of pelvimetry, Kerr emphasizes the value of pressing the fetal head down into the pelvis, and by bi-manual palpation gauging the relative size of the maternal pelvis and fetal head. This is done at the thirty-sixth week of gestation, whenever possible, and again at the beginning of labor, an anæsthetic being required; by the manœuvre he says he can estimate with great accuracy whether or not a head will pass the brim spontaneously, and also the degree of traction that is likely to be required should forceps be necessary. In the consideration of treatment he deplores the extensive use of forceps in contracted pelves, and states that the fetal mortality is much smaller where spontaneous delivery is allowed in cases where the true conjugate is not under 8.1 cm. While he does not entirely condemn the employment of forceps to assist the head through the pelvic brim, they are rarely used in his clinic unless indicated by an alarming condition of the mother or child. Pubiotomy is considered a valuable operation where the true conjugate is not less than 8.0 cm., even in infected cases. Premature labor may be induced only in multiparæ, provided the pregnancy has advanced at least to the thirty-sixth week, and the true conjugate is not less than 8.1 cm. In the major degrees of contracted pelves he limits craniotomy as a rule to those cases in which the fetus is dead, Cæsarean being the operation of choice in all other cases. R. B. M.

The End Results when Hysterectomy has been done and an Ovary left. By John Osborn Polak, M. D., M. Sc., Brooklyn, New York.

The results in a series of 132 abdominal hysterectomies, in which one or both ovaries have been conserved, are compared with the results in an equal number of cases where hysterectomy and double sal-pingo-oophorectomy has been performed. It was observed that a conserved ovary, if unhealthy, left the patient in a worse state, mentally, physically, and nervously, than if a total extirpation had been made. When a woman is at the age at which the menopause should occur, a total ablation gives the best results. The nervous phenomena are more marked with a high pre-operative blood-pressure, and the patient in comparatively good health, than when the blood picture shows anemia or toxemia. The symptoms of the operative menopause are less after extirpation for pelvic inflammation, than when the abla-

tion is done for fibromyomata. The final conclusion is that when one or both healthy ovaries can be conserved, it should be done; the younger the patient the more necessary is the conservation.

R. B. M.

(Surgery, Gynecology and Obstetrics, August, 1911.)

Subcutaneous Injection of Normal Human Blood Serum to Prevent and Overcome Post-operative Hemorrhage in Patients with Chronic Jaundice. By Willy Meyer, M. D., New York City, New York.

The author's interest in this subject was aroused by the work done by Welch with human blood serum in hemophilia neonatorum. Reasoning that similar treatment might be valuable in hemorrhage in adults, he used it in four cases of operation on the bile ducts in the presence of chronic jaundice. The method is to collect blood serum from two healthy human subjects (about 300 to 400 cc. being required) and inject in doses of 30 cc. three times a day, beginning two days before the operation, and continuing for forty-eight to seventy-two hours after operation. In three of the four cases thus treated, hemorrhage did not occur at all. In the remaining one, where only 105 cc. was given in all before operation, there was severe intestinal hemorrhage ninety hours after operation, which was permanently checked by five injections of 30 cc. each, with recovery of the patient.

R. B. M.

Primary Heart Failure in Normal Subjects Under Ether. By Yandell Henderson, Ph. D., New Haven, Connecticut.

Death of ether patients from cardiac failure is usually imputed to hypersusceptibility, heart disease, or status lymphaticus. As a matter of fact it is nearly always due to faulty methods of anæsthesia, not at the time of death, or five minutes before, but from one-half to three-quarters of an hour earlier. It is especially light, incomplete, and intermittent etherization which induces proneness to sudden death. This was proved by laboratory experiments on animals and by observation of fatalities in human beings. This may explain some of the sudden deaths in adenoid operations where the anæsthesia is incomplete and intermittent. Of course thousands of operations are performed under these conditions without fatality, but the fact remains that any prolonged light anæsthesia, with stages of excitement on the part of the patient, involves great danger of sudden cardiac failure.

R. B. M.

Colden's Liquid Beef Tonic

In cases of impaired appetite, gastro-intestinal atony and disorders of digestion due to subnormal secretory activity, Colden's Liquid Beef Tonic

Has Been Found Effective

in arousing the appetite, stimulating the gastric glands, increasing the digestive secretions and the activity, indeed, of all the gustatory organs. When Anæmia is a complication, Colden's Liquid Beef Tonic with Iron is indicated. Sold by druggists.

Sample with Literature will be sent to physicians on request.

THE CHARLES N. CRITTENTON CO.
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Storm Binder—The Favorite of the Medical Profession.

We note with much pleasure the wonderful growth of the Storm Binder in the favor of the medical profession. From a comparatively small beginning but a few years ago the business has grown into a large and profitable one. Dr. Katherine L. Storm, the inventor and head of the concern, is to be congratulated on this success, which has been won through the worth of her binder and her fair dealing. Dr. Storm not only has the satisfaction of having built up a paying business, but she also has the greater satisfaction of having scores of grateful patients to whom her name is a synonym for relief and comfort. The testimony of the numbers whom she has helped in various conditions through the efficacy of her excellent binder and supporter means more to Dr. Storm than any other phase of her success. Probably no other binder on the market has to so great a degree the favor and confidence of the medical profession. The Journal rather especially rejoices in the success of this woman physician.—[*The Woman's Medical Journal*, August, 1911.]

(The Boston Medical and Surgical Journal, October 12, 1911, Vol. CLXV.)

A Simple Diet Card and its Use. By Franklin W. White, M. D.

The author of this paper urges the necessity of the same careful attention in prescribing food as is used in the administration of drugs.

The amount of food is as important as the kind, and by amount is meant the number of food units or calories. A diet table has been devised for this purpose, and instead of grams, ounces, &c., the use of common household measures; such as slices, cups, platesful, teaspoons, or table-spoons are used.

The diet table consists of a list of foods, and gives the approximate number of calories, also grams of proteid, fats and carbohydrate in a convenient household measure of each. In addition there is a smaller table that gives the daily food demands for an adult, according to body weight and degree of activity. Made dishes, food not suited for an invalid, and some of the green vegetables of small caloric value are omitted.

The author does not claim extreme accuracy for this method of esti-

GASTRO-INTESTINAL DISEASES

are usually more severe and intractable to treatment during the summer months.

Through the prompt use, however, of

Gray's Glycerine Tonic Comp.

and careful regulation of the diet, it is always possible to control in short order, even severe attacks of entero-colitis, summer diarrhea or other bowel affections, and impart to the organism the exact tonic stimulation and recuperative power essential for complete and permanent recovery.

Free from all contraindications of age or season, "Gray's" presents all of the virtues and advantages of cod liver oil, or other tonics—with none of their drawbacks.

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mating food values, but considers it sufficient for practical purposes, and more likely to be used than the longer method of weighing each article of food.

The diet card is simple, convenient and practical, and enables one to estimate the value of any simple diet, or control the amount of proteid, fat, or carbohydrate as required in any given case.

A. H. W.

(The Therapeutic Gazette, September 15, 1911.)

The Modern Surgical Treatment of Non-Strangulated Inguinal Hernia. Charles W. Bonney, M. D., Philadelphia.

After tracing the history of the surgery of inguinal hernia during the past twenty-five years, the writer takes up his own method of preparation of the patient, and operative technique, the steps of which are given in detail.

(Continued on page 526.)

He advocates transferring the cord except in children and in adults with retained testicle, and advises against the use of wire netting. He believes that no fixed rule can be applied to the treatment of retained testicle, for in some cases it should be removed and in others brought down into the scrotum, depending upon whether or not permanent cure will be jeopardized. Operations for the radical cure in young children are not advised by the writer. The article is accompanied by six cuts illustrating the various stages of the operation.

T. J. B.

The Hypodermic Use of Mercury in the Treatment of Syphilis.

Walter D. Bieberbach, M. D., Worcester.

The writer criticizes the internal administration of mercury and the inunction method in the treatment of syphilis, on account of inefficiency in the former and difficulty of application in the latter, though he admits its value. He advocates the injection method of treatment, and for this purpose has used in about 90 per cent. of his cases a solution of the bichloride of mercury, giving one-eighth grain or more at a dose, and injecting it daily subcutaneously along both sides of the spine below the angle of the scapula.

In about 10 per cent. of his cases the author used an insoluble solution of mercury in the form of 30 per cent. gray oil, of which one cc. was injected deep into the gluteal muscles every four to six days. The total number of injections given depended on the severity of the case.

Of these two methods he prefers the use of the soluble mercury. The advantages of the injection method are too obvious for detail. Which admitting the value of potassium iodide in the treatment of tertiary syphilis, the writer finds that he is using less and less of it, believing that mercury is the drug of most value in the treatment of syphilis.

T. J. B.

Acute Nephritis Following the Intravenous Injection of Salvarsan.

By Henry Tucker, M. D., Philadelphia.

Dr. Tucker reports two cases, in which acute nephritis followed the intravenous use of salvarsan for the treatment of syphilis. In each case 0.6 gm. of salvarsan was given, and within one or two hours excessive vomiting occurred, the temperature rose several degrees, and large watery movements took place. Complete suppression of the urine followed in both cases; in the first instance, none being secreted after the injection, until death occurred, and in the second case, twenty-four hours passed before the kidneys resumed their function, recovery gradually taking place.

The writer concludes that accidents are bound to occur in the use of so powerful a remedy, and advises great caution in its employment.

T. J. B.

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Original Articles.

THE NECESSITY OF STATE CONTROL OF OUR PUBLIC WATER SUPPLIES.

By H. D. EVANS, M. D., OF AUGUSTA.

(Read before the 59th Annual Session of the Association at Augusta, June, 1911.)

Members of the Maine Medical Association :

I have been asked by your committee to present before you a paper dealing with some phase of the work of the state laboratory of hygiene, and I have chosen for a subject "The Necessity of State Control of our Public Water Supplies." I have chosen this subject in particular, rather than one dealing with some bacterial line of work, on account of its apparently unrecognized importance in this state, so rich in water resources.

In the course of this paper reference will be, of necessity, made to a bill which has been unsuccessfully presented to the last two sessions of our Legislature by the State Board of Health. Whether another attempt will be made to secure this much needed legislation I cannot say, but I wish, at the outset, to state that the opinions expressed in this paper represent only my own conclusions, and are the result of the investigations which the laboratory has made upon the subject. They may or they may not represent, either in full or in part, the feelings of that Board.

In the life of the human race two things, if we exclude air, have been absolutely necessary. Man has had to have something to eat and something

to drink. In the early history of the human family, man settled where these essentials could be obtained, for, with the transportation facilities then existing and with the utter lack of classes of society serving single and specialized ends, it was easier for the primitive man to move himself and his family and possessions to the lands of game and forage and water, and there live, than to bring these things to himself.

Only when man began to practice some special trade or occupation did the necessity of quick and constant exchange of commodities or labor drive him to live in groups in some fixed locality; and only then did the question of bringing what he should eat and drink from a distance confront him. The question of food received the earliest attention, for his towns were located by the springs of the desert or by the fords of the great rivers; and when, later, the necessities of trade drove him to build his villages far and wide over the face of the country, he found that he could derive a water supply from shallow, surface wells, even if springs and rivers were not at his doors.

The sanitary ideas of the early man were at least as primitive as were those of our not distant ancestors. Disposal of his wastes received but little of his attention, and as villages grew into towns, and towns into cities, not only did the quantity of water to be derived from his shallow wells prove inadequate, but the quality became such as to make the water physically distasteful. Thus he was forced by the needs of his physical nature to bring into his cities, water collected from a source other than the underlying soil of these same cities. But for centuries his main idea was to get *enough* water. Quality, outside of physical appearance, played but little part in directing his choice of a source of supply. When the muddy appearance of the river water near his town drove him to the hills for a spring supply, the scanty population of these districts gave a supply of water that was both physically pleasing, and one that was safe from a sanitary point of view. But, when the river water by his towns and cities was clear, he went no further for his source of supply, and the resulting water was far from satisfactory, as we would understand it.

Yet, even in the early days of our civilization, it was recognized that water had an important bearing on the health of the community. Hippocrates wrote on the value of pure water, some four hundred years before the Christian era, and advised boiling and filtering a polluted water before using it for drinking purposes.

That the use of waters, especially from wells in the midst of thickly populated districts, and from rivers into which the wastes of a city had been discharged, could cause disease was recognized; but the causative agents were unknown, save as fruitless subjects of speculation. Whether the cause was a miasma, arising from the surface of the water, or an un-

known toxic substance, suddenly appearing, and as suddenly disappearing in the waters, made an interesting subject for speculation, but amounted to nothing more.

Thus we find that the public water supply came into being, and was a distinctive mark of a city. It was a thing forced upon the people, on account of the impossibility of obtaining enough drinking water from the wells of each individual householder. From the city the public water supply spread slowly to the towns, where, on account of the better ground water supply, its primary adoption was on account of its convenience, and not because of any sanitary reason.

As long as a people's object in obtaining water, was simply to get something wet, it was perfectly natural that they should seek for a source of supply that was located as near to their towns and cities as possible, and so should be cheap and easy of transportation. Briefly our ancestors wanted a lot of water, and they did not want to go any further to obtain it than was absolutely necessary. The logical outcome was an almost universal adoption of surface waters as sources of public water supplies; and the taking of these waters from the rivers and streams, just as close to the point of distribution as possible, without any attention being paid to the fact that populous communities bordered these same waters above the intakes.

In the light of the knowledge then existing in regard to disease, this manner of procedure was both natural and logical, for "miasmas" might arise from any waters, and toxic principles might appear in one water as well as another.

Along with the need of a public water supply the gathering of people into towns and cities gave rise to a need of some means of disposing of the sewage wastes of these localities. Like the need of a common water supply, the first thing that called attention to the need of sewage systems was probably the purely physical discomfort arising from the inability of the soil of the towns to dispose of the wastes thrown upon it, without creating a nuisance.

But the effect upon health of sewage wastes, lying undisposed of upon the ground of a town, was earlier recognized than was the effect of a polluted ground water; and the necessity of the removal of such wastes was early appreciated. The method of sewage disposal adopted by our ancestors was the natural one of piping these wastes into the nearest watercourse; a method which, with proper limitations, is still the usual manner of disposal of such wastes. The dilution of the sewage with the water of the river or stream removed the nuisance, so that, after a short distance of flow, no visible evidence of this sewage pollution remained. It must be remembered that visible evidence was the only evidence possessed by these people to

tell them of pollution of a water; and so the taking of a drinking water from a river into which sewage had previously been emptied was in no way repugnant to their ideas or feelings.

Thus it was that the two primary needs of man, when he had grouped himself into towns and cities, tended to make his rivers and streams both the place of the disposal of his sewage wastes, and the source of his drinking water; and the motive force in both cases was convenience and cheapness.

Long ago, as population increased in density in Europe, the relation between sickness and a polluted water supply began to be noticed; and straining and filtering of water supplies began to be practiced long before any scientific knowledge of the reasons for it existed. Here also the people began to turn to the use of deep waters, and to ground waters from uninhabited areas.

But in our own country different conditions existed until recently. Large cities are, with us, of comparatively recent development. Scarcity of population for a long time rendered surface waters quite free from pollution until a recent period, even in the eastern states. As in all new and developing countries, our early supplies have been drawn from our nearest river, stream or pond; nearly all of which were in good condition when the water supply was first installed. But, with the growth of population and of manufacturing industries on the banks of our rivers, they began to assume the polluted condition of the rivers of Europe, and epidemics of intestinal diseases were yearly expected.

Some thirty years ago the science of bacteriology had its birth, and the epoch-making discoveries of the microscope began to throw new light upon the causative factors of many of the diseases to which the human race is heir. Prominent among these discoveries was the one that a specific micro-organism is the cause of typhoid fever; another, of cholera; and others give rise to milder intestinal disorders.

Then followed the detailed studies of the life and habits of these organisms; the mode of their entrance into the body of man, and the method of their elimination. When it was learned that the micro-organisms, causing the above mentioned diseases, gained access through the mouth, were eliminated in immense numbers in the urine and fecal discharges, and that they could live for a time in water, then not only was the relation between a sewage laden water and these diseases at once apparent, but the problem of choosing the source of a water supply took on both a new and an added importance; while the question of safeguarding a water supply became both a live and a popular one.

I do not intend to take the time of this meeting in a technical discussion of either sewage disposal or water purification. I wish rather to bring

to your attention the conditions existing in this state, which render necessary the control of the sanitary condition of our surface waters by some central authority.

At the outset two facts confront us:—(a) our rivers and streams are now, and have from the earliest times, been used as the depository of our domestic and industrial sewage, and have been used as a means both of removing it from our doors and of preventing its becoming a nuisance, by greatly diluting it, and (b) our rivers and streams have been in the past, and to some extent are now, used as the sources of public water supplies, without reference to conditions on the watersheds above the intakes of the water supplies.

I do not need to call your attention to the condition of the large rivers of the state. Every town upon their banks, either directly or indirectly, empties into them its domestic sewage. Every paper mill, woolen mill, cotton mill, saw mill, tannery or other manufactory, having industrial wastes to dispose of, uses these watercourses to cheaply remove it. Upon the continuance and prosperity of these manufacturing industries depends largely the life and prosperity of the communities in which they stand; many of these communities being dependent for their very existence upon the presence of some industry, which empties into our rivers large amounts of industrial wastes. For instance, what would become of the towns of Millinocket Penobscot County, and Woodland in Aroostook County, if the paper mills were forced to close?

In the stress of present day industrial conditions the margin between the cost of production and the selling price of the finished product is shaved very thin. A very slight addition to the cost of production of many an article manufactured in our state would cause production at a loss; which would mean the closing of many an industrial establishment. If the mills in our state were obliged to dispose of their wastes by other means than that of emptying them directly into the rivers and streams, and, at the same time, and at a greater distance from their market, compete with mills that are not only nearer to the markets, but are also permitted to empty their wastes into the rivers and streams without any treatment, it would mean the closing of many a mill, and the ruin of many a prosperous community.

It is thus evident that, in considering the pollution of our streams by manufacturing wastes, without any common basis of agreement between the different states, we have a question affecting not only the physical but the industrial life of our people. It becomes a question of balancing the economic costs of purifying the industrial wastes against the cost of either purifying the river waters, used as public supplies, by filtration or changing the source of supply. It is safe to say that no legislature will ever pass a general law, under which it will be necessary to so purify industrial wastes that

the water of the stream that receives these wastes will be safe to drink without filtration. That the manufacturing plants may be compelled to prevent the watercourse from becoming so overburdened with putrescible wastes as to become a physical nuisance is not only right and proper, but it is possible under the present general law.

If the sanitary officers are to tell a manufacturing industry to purify their wastes before emptying them into the streams, they must be expected to specify the manner of this disposal, and to show how it can be done at the least possible loss to the manufacturer. If means can be devised for the disposal of our various manufacturing wastes at a profit, however small, from the by-products, then we need fear no stream pollution from such wastes. Some trade wastes can be thus profitably treated, and return a profit from the utilization of those things which were formerly their most objectionable substance. Such is the case with the wool industry; but in the case of the great pulp, paper and lumber industries, so essential to the welfare of our state, no such means of economical disposal of their wastes are known.

In the case of the disposal of our domestic sewage, which is far more dangerous to the health of our people than is a much greater amount of industrial sewage, means are known both of purifying it before it enters a stream and of economically purifying a water into which unpurified sewage has entered. With the financial backing of entire communities behind it, it should not be improper to compel treatment of domestic wastes when they enter a stream, which is used as a source of water supply, at some point below the entrance of the sewage. It cannot be questioned, however, that the abandonment of the use of such a watercourse for drinking purposes is far safer than any attempted purification of the sewage wastes entering it, or of purification of the water after the entrance of the sewage. In this state, so rich in unpolluted lakes and ponds, rivers and streams are not surface waters that should be used as sources of a public water supply under any conditions.

When we turn to our lakes we find a better condition of affairs, for in this state, the population about these bodies of water is either entirely rural, or is composed of cottagers. About our lakes we have as yet no problem of industrial wastes, although the possibility of the future occurrence of such wastes is always to be considered. The domestic sewage problem is here a different one from that on our rivers and streams, since here we have the sewage of various isolated dwellings to deal with, and not the collected sewage of an entire community. In addition, the domestic sewage of the cottages about our lakes is rarely, if ever, piped into the lakes, but is disposed of in a cesspool located back from the shore. With the present condition and distribution of population about our lakes it is easy, with proper

care, to keep the waters pure. It is easier to keep them pure than it will be later to purify them, if they once become polluted through the indifference of the people.

From this brief summary it is evident that our rivers are already grossly polluted by both domestic and industrial sewage, and that the problem of rendering them so free from such wastes as to be fit for drinking, without previous filtration, is not only great but is now, both for industrial and financial reasons, practically beyond control. On the other hand, our lakes and ponds are now free from pollution by both domestic and industrial sewage, and are in generally good condition to use for drinking purposes. Here the problem is not to purify them, but to keep them pure; and this is well within the limits of possible and practicable control.

The first public water supplies of our state were those of our cities. A glance at the map shows these to be located either upon the coast or upon the larger rivers. These cities generally established their supplies before the relation between typhoid fever and water was well understood. In the case of the cities, located by the rivers, they naturally took their water supplies from the rivers, which ran past their doors, and just as naturally they became typhoid fever centers. The original, and, in some few cases, the present supplies of Calais, Caribou, Dover, Oldtown, Bangor, Brewer, Skowhegan, Waterville, Augusta, Gardiner, Richmond, Brunswick, Lewiston, Auburn, Rumford Falls, Biddeford and Saco were taken from the rivers that had flowed past the doors and sewers of many of their neighbors before reaching their own intakes. The story of the activities of the typhoid bacillus in these towns and cities is but too well known. The river valleys of the state have all, at one time and another, been hot beds of typhoid, and only the slowly awakened public knowledge and conscience has changed this condition.

With each passing day the rivers and streams in the settled portion of the state are assuming a worse and worse condition. The lower St. Croix, the Penobscot below Millinocket, the Aroostook below Presque Isle, the Piscataquis below Guilford, the Kennebec below Madison, the Androscoggin below Berlin, N. H., and the Saco below the Grand Falls, are now unfit to use as sources of drinking water, unless the water be first purified by filtration. The march of population is ever *up* the rivers, so that the river reaches now above the sewered towns will, in the future, certainly become polluted.

It is well to note here that all of the towns and cities that have been driven inland to purer lake supplies, or have adopted filtration of the polluted river waters, have in all cases taken upon themselves the added expense of changing or purifying their supply; and have in no case demanded that the towns and industrial establishments on the upper reaches of the

river purify their wastes. They have tacitly recognized the right of these towns and establishments on the upper river to use the watercourse as a main trunk sewer, so long as the amount of the sewage wastes does not become such as to make the river a nuisance. This is not an endorsement of such a course on my part, but a simple statement of fact.

The lakes used as sources of water supplies are, naturally, the ones located near to the center of distribution of the water. With the rapidly extending trolley systems these lakes are coming within easy reach of the city and town dweller, and cottages are springing up all about their shores in ever increasing numbers. Each additional cottage erected upon the shore of a pond used as a source of a public water supply is an additional source of danger to the users of that water, under present conditions of water control. This is not saying that these cottages are *necessarily* a source of danger, but that they are such simply because no person exercises the necessary authority to compel the adoption of such sanitary arrangements as will prevent the entrance of unpurified sewage into the water. If our lakes are to remain pure and, at the same time, as is right and proper, are to support an ever increasing summer population about their shores, some means must be adopted at once to keep them in their present condition by the exclusion of the sewage wastes from these cottages. That this is a thing entirely possible is shown by the successful care which is taken of the wastes from the cottages about Lake Auburn, with its large summer population.

Some ponds are so small, and their shores are so steep and rocky and of such geological formation as to render every cottage built upon their shores a continual source of danger, without the most strict of supervision. In our settled communities where such lakes are sure, sooner or later, to become summer resorts, a grave condition faces the community. The ideal condition is, of course, for the water company to own outright the shores of the pond. The financial means of most of our small water companies rarely renders this condition possible of attainment.

It is doubtful if, under our present laws, any person can say, and can enforce the statement, that no cottages shall be built by the owner of a shore property on such a pond as the above. It is well within the powers of a local board of health to adopt building and sanitary regulations, intended to prevent the pollution of their water supply, which shall be so stringent and yet so just to the entire community, that the expense of complying with them will practically prevent building. It is, however, a fact that there is rarely co-operation between the health authorities of the small towns and the water companies until it is forced upon them by some outbreak of waterborne disease.

Our cities take their water from sources of supply of such size and extent as to make impossible, in most cases, the purchase of the shore rights,

even when the water company is a municipal corporation, backed by the entire taxable property of the community. Portland, and Lewiston and Auburn are examples of this class, the former taking its water supply from Sebago Lake, and the latter from Lake Auburn; the first a lake 20 miles long, and the latter 6 miles in length. Here the only possible thing is to care for the wastes of the farms and cottages in such a manner as to prevent pollution of the water. To do this some central authority must exist, with power to enforce its orders, and at all times on the watch.

At present water districts are growing in favor in this state. These, being really municipal corporations and formed by the union of many towns or cities for the purpose of obtaining a common and pure water supply, naturally require a large supply of water. Backed as they are by the combined resources of a large community, their financial ability is greater than is that of the private water company, and we find them taking greater care of conditions about the source of supply than can the private company. Some are in that ideal situation, where they own the entire shore rights about the pond, and so can exclude all building.

Here then are the conditions existing in this state at the present time: (I) In the settled portions, the rivers and streams are so polluted by domestic and industrial wastes as to be unfit for drinking without filtration; (II) with the extension of the thickly settled portion of the state, streams now unused and unpolluted will assume the condition of those in the more thickly settled portion of the state; (III) towns which formerly used water from polluted rivers have, almost without exception, changed their sources of supply to ponds and lakes, or, in two cases, have filtered their supply; (IV) by so doing they have tacitly admitted that the streams and rivers are legitimate channels for the disposal of sewage of all kinds, so long as the volume of the sewage is such that it does not render the river a public nuisance; (V) such an admission is apparently necessary for the maintenance and prosperity of great manufacturing interests, whose products have to compete with similar products, produced in states which do not require purification of such wastes; (VI) at this time the great majority of our communities have turned to our lakes for a water supply, which lakes are now pure, but (VII) are becoming rapidly centers of summer colonies, which, if allowed to spring up without oversight and sanitary regulation, threaten the purity of these lakes and the water supplies taken from them.

In many states of the Union, and in an ever increasing number, the water supplies, both private and municipal, are under the supervision of the State Board of Health; who have not only an oversight of these supplies but actual control of them. If a supply is polluted the Board can order it purified in a manner satisfactory to themselves, or the source changed. New water companies must submit all plans to the Board for expert ap-

proval before installing supplies, and likewise when making changes in existing supplies. The Board can make all necessary regulations as to the sanitary conditions on a watershed, used as a source of water supply; and has full power to investigate all sources of possible pollution, and to enforce their rulings. The Board also has authority to pass on the disposal of sewage of all kinds, that is to be emptied into streams and ponds used ultimately as sources of water supply. In fact they have the power to force on even an unwilling water company the necessity of supplying its customers with a fit and safe drinking water, or to stop supplying any.

The state of Maine has no such laws. The State Board of Health can investigate and make known its findings in the case of polluted or suspected polluted supplies, when complaint is made to them; but they have no authority to force a change of source of supply if they find the present one to be polluted, nor can they compel filtration of the supply if that appears most expedient.

If the source of supply lies in a single town, as a few do, the local board of health can make regulations governing the sanitary conditions about the pond, which, if approved by a Justice of the Supreme Court, have the effect of law. In these regulations they can impose penalties and can enforce obedience if they are willing to constantly inspect the watershed. This most are unwilling to do, and so, after making regulations which would protect the water supply if they were enforced, they allow them to remain dead letters until an epidemic of waterborne diseases arouses them again to temporary action.

Recognizing these conditions and the need of having some central authority, which should not only investigate but should enforce sanitary measures for the protection of our public water supplies, the State Board of Health had a bill presented to the legislature of 1909, giving them authority to look after and protect the surface waters of the state against pollution. The bill gave them control of the sewage conditions that might prevail about the sources of the waters used for drinking purposes; authority to enter, anywhere and everywhere, to investigate sanitary conditions on a watershed; authority to force discontinuance of any conditions that might lead to pollution. In brief it gave to the Board an entire oversight and control of the sanitary conditions about the surface waters of the state.

Before the Judiciary Committee of that year the bill encountered opposition from those living about China Lake, and from two lawyers on the ground that it was giving too drastic and arbitrary powers to the Board, and, even if it were not doing so, it was unconstitutional. The Committee referred it to the legislature of 1911.

When the bill came up for hearing this year the same opposition developed as before, and, in addition, the manufacturers appeared in opposi-

tion, as they feared that the bill would force them to purify their industrial wastes as, under the original draft, could be done.

In presenting the bill to the Committee, Dr. Smith, President of the State Board of Health, stated that the Board was willing to make some changes in the existing draft of the bill, as they recognized the point of view of the manufacturing interests. They would so modify the bill as to exclude from its provisions, so far as industrial wastes were concerned, the rivers and streams of the state, recognizing them as trunk sewers, and permitting their use as such as long as the wastes emptied into them did not create a nuisance. When this modification of the bill was understood the opposition of the manufacturing interests was withdrawn.

To the bill, as thus amended, the following objections were raised: (I) it was unconstitutional, (II) it put into the hands of the Board powers greater than those exercised by any board or commission known, giving them legislative, executive and judicial powers, by which they could make criminals of their fellow citizens, (III) that there was no need of the bill, as the local boards of health could do the work under their present powers, and (IV) that the bill ought to specify definitely the manner of the regulation of the watersheds, and not be of such general character as the proposed bill, which allowed wide latitude to the governing board.

It is not my intention to discuss this bill. I do intend to discuss the objections raised to it; but I do this because a thorough discussion of these objections will make the strongest possible argument in showing the need of some central body, possessed of the powers necessary to protect our public water supplies.

The four objections above noted were the only ones advanced and supported by the opponents of the bill. If the objections are taken up separately it will be seen how little foundation they have in fact, and how obviously contradictory two of them are.

(I) The bill is unconstitutional. This has seemed to be a stock argument before the Judiciary Committee. I am no lawyer to discuss this objection, and so shall have to pass it by with the simple statement of a few facts.

The bill, as drawn, was modeled upon the existing statute law of Massachusetts. The only changes made from the original Massachusetts bill have been those of omission of certain sections, dealing with manufacturing and sewage conditions which do not exist in this state; omissions which render the bill less drastic than the Massachusetts law. Much of the bill is in the very words and terms of the Massachusetts law, with only such changes in the phraseology as different conditions and different terms of designation of water supplying corporations in this state have rendered necessary.

This Massachusetts law has been of gradual development, and the vari-

ous sections of it have been drawn by able lawyers of that Commonwealth. In many cases, I am told, the sections have been drawn by her Attorney Generals. In addition it has, under the natural opposition of many interests, been tested out in the courts of that state, almost section by section; and the Supreme Court of that state has not been able to find it unconstitutional. Unless there is some fundamental difference in the basic law of Massachusetts and Maine, it is difficult to see how the cry of "unconstitutional" applies to the bill in question; especially as, I am informed, the constitution of Maine is modeled on that of the parent state of Massachusetts.

The next two objections can best be considered together. They are as follows: (a) the bill gives the State Board of Health powers greater than those granted to any existing board of commission, and (b) there is no need of this bill, as local boards of health have already the powers to perform the duties here asked for by the State Board of Health.

Here are two arguments, both advanced with entire gravity and with apparent lack of appreciation of their contradictory relation. In brief they are that this bill grants to the State Board of Health greater powers than those vested in any other board; which powers, these same opponents of the bill argue, are even now vested in the local boards of health of every town and plantation of the state by statute law.

Study of the bill shows that it gives no such arbitrary powers as is claimed, to the State Board of Health. They can do nothing by the simple process of issuing an order. They can pass no single regulation, or force no single change, except after a duly advertised hearing. Appeals from the rulings of the board can be taken to the Supreme Judicial Court as in any civil case, and land damages are to be settled in the same manner as prescribed by law in the case of condemnation of lands for roads. Every existing state commission possesses these same powers, as was pointed out by a member of the Judiciary Committee.

In truth the second of these objections answers the first one completely. In order to pass fair and accurate judgment upon any question, a full investigation of all existing conditions must be made. When doing this in a question dealing with water pollution it is absolutely necessary that the investigating officers have the right to go anywhere, and to enter any place on the watershed. Without such a right the investigation would be but a farce. To local boards of health the law now gives these very rights and privileges. Local boards of health are not, except in rare cases, sanitary experts. The members of such boards recognize this fact, and, on important questions, refer the matter to the State Board of Health, a body of men who are expected to be skilled in sanitary work. And yet we find objection made to specifically granting to this trained board those powers already granted to untrained local boards of health; the possession of which

powers by these local boards of health is approved by the opponents of this bill.

I am informed that the local boards of health have the power to initiate investigations; but that practically all investigations are made by them only after complaint has been lodged with them. In other words, after the horse has been stolen the barn is locked. Under existing conditions this is to be expected, for these local boards receive no compensation, and so must be composed of men who are busy earning a living in other walks of life. In addition, while the members of such boards are not themselves competent to make investigations of water supply and sewage questions, the funds at their command are not sufficient to permit of the employment of a sanitary expert to do this work for them. They can simply report the matter to the State Board of Health, and ask for assistance, which the State Board of Health is, under present conditions, unable to give.

What is asked, and is needed, is not that the State Board of Health shall, when complaint has been made and the damage done, make an investigation as to the cause of the pollution of a water supply; but that it shall be their legal duty to now, at the present time, make a thorough investigation of all of the water supplies of the state, as they now exist; that they shall adopt means to remedy present cases of pollution, and force adoption of these measures if necessary; that they shall keep supplies now pure in that condition, and, through a continuous oversight of our water supplies and our watersheds, shall keep pollution from them.

It is asked that this be made not a privilege but a duty. It is asked that this Board be compelled to prevent pollution of our drinking waters; not to investigate the cause of an epidemic of waterborne disease *after* it has reaped its harvest of human lives. Certainly this does not seem a particularly heinous crime, and in the light of the fact that a single unsanitary outhouse upon a watershed may cause numerous cases of sickness among users of a water collected from it, the right to enter a man's house without a search warrant, with the sole purpose of seeing that a sanitary condition is maintained, cannot be considered as despotic a use of power as the opponents of this bill would have us believe.

Even if a local board of health had the training, the money and the expert assistance necessary to investigate water and sewage conditions, and could keep an inspector constantly at work on these questions, yet, in the majority of cases, they could not prevent the pollution of their own water supply.

No river from which a water supply is taken, has its rise, its entire flow and its mouth in a single town. Our water supplies taken from great ponds come from ponds, great not only in the legal sense of the term, but literally from great ponds. Seldom do such ponds lie wholly in a single

town, or even in the town using it for a water supply ; but rather they enter within the limits of several towns. Now the powers of a local board of health are operative only within the limits of that particular town. The town of Farmington takes its water from a pond in the town of Temple. The local board of health of Farmington can exercise no authority over the shores of that pond. Such rights are vested in the Temple board of health.

If the people of Temple had pleasure or manufacturing interests about this pond, whose value would be affected by the imposition of such restrictions as would give Farmington an absolutely pure water supply, you know as well as I what results the efforts of the Farmington board of health to protect their town would have on the town of Temple. This is exactly the case which exists in regard to the majority of our water supplies, which are derived from ponds and lakes.

Even supposing that the source of a town's water supply lies partly within itself, and partly within a neighboring town, as very often happens. While the town, using the water from this pond for drinking, might be willing to protect its portion of the watershed, yet this willingness would be of no avail unless the other town, out of the kindness of its heart, would co-operate in like measures. If only one of the towns, within whose limits the pond lies, uses it as a source of a drinking supply, this co-operation would be almost impossible to obtain.

It is thus evident that the local boards of health, for all their wide powers within their own borders, are not legally able to protect the sources of their water supply, even in the majority of cases. It is equally evident that some central authority, having similar duties but state-wide powers, is needed for this work. It is just these powers, no more and no less, that the bill before the last two legislatures would have given to the State Board of Health.

It thus appears that these two objections, contradictory as they are to each other, fall to the ground for reasons other than their contradictoriness. Let us look for a moment at the fourth and last objection.

This is that definite rules as to location of buildings, sanitary arrangements, and disposal of wastes must be incorporated into any law covering the protection of a water supply ; thus removing the dreaded arbitrary powers from the governing board, who might impose hardship upon the people otherwise.

Such a law, to be of any value, must so far remove all sources of pollution and so regulate the disposal of all wastes as to protect, always and in every case, the waters of every pond used as a source of water supply. To be effective its provisions must be so stringent as to exclude the possibility of pollution of that pond, whose surroundings and geological condi-

tions render it the easiest of all ponds to pollute. The provisions of such a law must, by the very nature of things, be far more arbitrary than any that any trained body of men would propose, save in the case of this single and most easily polluted pond. Such a proposal takes no recognition of the injustice and hardship that would be imposed upon the dwellers, by the hundreds of other ponds in the state, whose surroundings and geological conditions permit of a safe disposal of wastes nearer to the shores.

This will be well illustrated if we contrast the conditions about a mountain lake, with steep, boulder shores, with those about such a lake as Lake Auburn, with level and sandy shores. In the former case the cottages must, of necessity, be located close to the water, while the ground on which they stand is but a natural rock drain. In such a case it is proper and necessary to compel the collection of all domestic wastes in water-tight recepticals, and its burial far from the water. Only thus can the safety of the water be assured. In the latter case it is both safe and proper to permit the disposal of domestic wastes in cesspools fairly near to the shore; for the sand will give efficient filtration of the wastes. Yet a law to meet all cases would have to compel the same disposal of the wastes in both of these cases, and instead of working a justifiable hardship in a very few cases, it would extend these hardships to the dwellers by every lake and pond. That the governing board should be allowed to use their own expert judgment to decide each case on its merits, needs, I think, no further argument.

If this paper shall have at all directed the attention of the physicians here assembled, to the need of protecting our water supplies from pollution, rather than to purifying them in later years, after waters now pure have become polluted; and shall have called their attention to the need of immediate action upon this question, the writer will consider this paper as worth while.

. . . *DISCUSSION.* . . .

Dr. S. C. GORDON, of Portland: Mr. President, Members of the Association: Something should be done, there is no question about that, so far as the domestic supply of water is concerned. Perhaps we have in Portland as good water supply, I won't say the best, but as good water supply as there is in the United States, and yet they are building cottages all around Sebago Lake, east and west, north and south. The board of health and the authorities of the city are looking vere carefully after the waste and sewage from these cottages. So far I think they have succeeded in limiting the whole thing to cesspools. At any rate you can't find a cottager who does not say that he absolutely has a cesspool which takes care of all his materials. Fortunately, on the west side of Sebago Lake it is largely sandy, porous soil, and before the sewage comes to the lake, even if it does get to the lake, it is thoroughly well filtered. They also have obliged the steamboats on the lake, and there are several of them now besides a good many motor boats, they have

compelled them to have earth closets, and everything of that kind is dumped after they get up to the head of the lake, and off far enough so that nothing comes from it. But I am truly in accord with the paper of yesterday that something must be done by the legislature, by the state, to prevent this sort of thing rather than to cure it—by way of illustration, not to lock the stable after the horse is stolen. Prevention is the ideal thing in our position to do and we must not lose sight of it. We must not take one single step backward, but we must be up to date and up to all the points that the idealists now claim. It is not idealism now. It is no longer idealism. It is wholly practical, a thing that every householder is interested in or should be, and we must not relax one single effort. Let us come up as we did last winter to the point of sustaining the profession in their ideals, and we will then be what I believe the profession in Maine is now getting to be, the equal if not the superior of almost any association in the United States. We are doing good work. We believe in what we preach, and we want to practice it every day and in every single legislature that comes up where any legislation is required. So, gentlemen, let us not relax in this matter of water, pure water for household purposes.

Dr. A. S. THAYER, of Portland: I want to say just one word. I was not present last night so I did not hear it at all, but one thing in our water supply, I think, should be watched very carefully, and that is the bringing of water through lead pipes into houses. I think we should all be surprised if we could know how many people are poisoned by the use of water that is taken from lead pipes, and I think we would all be surprised to find how prevalent it is in certain parts of the country. Just as an illustration, I found a young man at West Paris who suffered from lead poisoning some three or four years ago, and when I came to investigate I found he was taking water through a lead pipe from a spring. I found that a large part of the inhabitants of West Paris were taking water in the same way, and that there were quite a number of people who were suffering about the same as this young man was. Well, I tried to warn them against taking water in such a way, and even the physicians in that little town said that there was no danger from the water. We had the water, that this young man was using, analyzed, and we found it loaded with lead. They did not heed. They kept right on. In about a year, or a year and a half, one of the physicians began to think there was something in it, and he obtained from six different places six samples of water and sent them to the laboratory to be examined. The report came back that five of those waters were unfit for use; the other contained a little lead, but thought perhaps it was not unsafe. I think the physicians throughout the state ought to know this, and as the symptoms are so obscure and come on so slowly I think the profession ought to be specially well informed in regard to this one matter, and look out for their patients, find out what they are drinking, and find out where the water is coming from. I think it is very prevalent in certain parts of the state.

Dr. F. H. JACKSON, of Houlton: Dr. EVANS made a point yesterday that seemed to me to be very important. There are very few cities and very few towns that are getting a water supply locally. We are going further back and further back each year in the attempt, as Dr. GORDON says, to find pure water. Now it seems to me that there must be some uniformity, some agreement between the local board of health of the town that is drawing the water and that of the town that controls the water supply. A great many of these water supplies are in isolated districts and the local boards of health of those districts are hardly up-to-date, and as Dr. GORDON says, if that water supply is polluted there is no way of getting around

it. What we need to do is to get in touch with the local board of health of the town from which we draw our water and prevent that water supply from being infected.

Dr. A. G. YOUNG, of Augusta (representing the State Board of Health): I was very much interested yesterday in the remarks of our President in regard to the loss incurred by our state on account of the prevalence of typhoid fever. The loss to the state is truly immense—the loss of life mostly at those age periods when lives are of the greatest worth to families, communities and state, the loss of the time of those who have typhoid fever, loss of the time of friends and relatives during their periods of illness, and loss in the efficiency of many of the persons who have survived attacks of typhoid fever; for it is now pretty clearly established that attacks of infectious diseases very often leave the system in an abnormal condition and one in which premature aging occurs.

Aside from these losses is another very serious one which it behooves us more and more to take into consideration. I was talking only a short time ago with one of our leading hotel men, one who is, perhaps, in a better position than any other man in the state to make an approximate estimate of this kind. He told me that he has figured it out that at the present time the tourist business is worth between twenty-two and twenty-three million dollars to the state of Maine; and he further said that if the state of Maine did its duty he had no doubt that that amount could be doubled in a comparatively short period of time; for the reputation of the state of Maine, so far as scenic and climatic conditions are concerned, is receiving recognition more and more every year.

We should, therefore, bear in mind that aside from our duty to the citizens of our own state there are other important interests in the direction which I am suggesting which should be considered.

From my own official experience I find that the people who take summer vacations are becoming more and more shy of conditions which may be detrimental to health, and particularly of conditions which suggest the possibility of typhoid infection. Through the influence of the newspaper and magazine press typhoid infection is perhaps the one thing which these people have come to think of more than anything else.

The State Board of Health will probably again offer to the legislature a bill providing for the protection of our public water supplies from pollution. It will advise what is needed, but it will not resort to the methods of the lobbyist in trying to get such a bill through. For that we must depend upon the influence of the intelligent citizens of the state, professional and non-professional.

An act of this kind is not needed in the interest of health alone. Around many of our lakes which now serve as sources of water supplies or which may in the future, the interests of the cottagers and of pleasure seekers and of industries should be considered. Generally it may be said that there would be no need of banishing cottages from the shore nor of excluding boating, but rational rules and regulations against certain dangers are required. Under a law like that of Massachusetts, for instance, the State Board of Health would consider the claims of all of the various interests and arbitrate them when it was found necessary to do so.

In closing, I submit whether it will not be a blind policy for the state of Maine not to keep up somewhere nearly with the most progressive of the states in her public health work.

H. D. EVANS (closing discussion): Mr. President and members of the Associa-

tion: The object of bringing that paper before you yesterday, was simply to turn your attention toward the subject which my work in the laboratory has shown me to be of ever increasing importance, and I wanted to show in that paper particularly, the fact that however eager and willing a local board of health might be to protect its water supply, in the majority of cases they could not do it; that if they could not do it themselves it then became absolutely necessary for there to be some central authority which should exercise that care; whether it be the State Board of Health or a special board appointed for that purpose, I have no opinion, but there has got to be some central authority whom the law shall compel—not say perhaps it *can*—but shall compel to look out for the protection of our public water supplies. There has been lots of complaint in regard to some supplies on account of the rather drastic action which has been taken by water districts in seizing the property. But just as long as there is no authority which shall decide whether cottages located on a lake shall dispose of their waste in a sanitary way, the only method of protection of those lakes is to give to those water companies absolute authority to take up the land if they need it.

In regard to the question of lead poisoning, which came up in this discussion, I will say that about three years ago we commenced to obtain samples which had come from lead pipes. Since that time we have had over a thousand samples, and if you include Aroostook County, which is a limestone formation, and which is therefore possessed of a water pretty hard, highly mineralized, and so having the solvent powers practically used up, you will find our records show that 95 per cent. of the samples that come from lead pipes show the presence of a dangerous amount of lead; and if you exclude samples from Aroostook County, you will have over 98 per cent. of the samples which come from lead pipes containing a dangerous amount of lead. And I will say that the geological maps put out by the United States Geological Survey show that this state, with the exception of some few areas like Aroostook County, is underlain by a rock which will give you a very soft water, and you are almost sure in such waters to obtain lead action.

PELLAGRA.

Report of a Case with Clinical Demonstration.

By HENRY W. MILLER, M. D., SUPT. INSANE HOSPITAL, AUGUSTA.

(Read before the 59th Annual Session of the Maine Medical Association at Augusta, June, 1911.)

The growing importance of the pellagra problem in the United States and the fact that this case is the first of pellagra in the state of Maine, is my only excuse for making this presentation and offering some remarks upon recent work in connection with the etiology of the disease. The case was first recognized by Dr. G. A. Pudor, of Portland, and reported by him in the April number of the Maine Medical Journal.

The essential points in the history are as follows: Patient a woman, single, 21 years old. Father died at 58 from cancer of the face. Mother

living at 56. An uncle and cousin insane. Paternal grandfather died from cancer, age 80. Patient is second youngest child in family of eight children. One brother died at 21 from appendicitis. The other brothers and sisters are in good mental health.

Patient was born on Chebeague Island, Maine, (in a rural community). Has lived there all her life, never leaving except for a brief visit to Portland. The patient's father was a fisherman; the family were in comfortable circumstances, living in comparatively good hygienic surroundings. There are said to be running streams in the vicinity. She had measles and whooping cough in early life. Made good progress in her school. Was mentally normal, of a cheerful disposition, but was considered always rather delicate physically.

During the past few years she has worked through the summer as a waitress; in the winters, at home. Menstrual life normal. Her diet was the same as other members of the family. She had meat once a week; fish two or three times a week. The bread was made of ordinary wheat flour. Indian meal was not used as a cereal, was not used in household except in brown bread, which was made on Saturdays. Corn syrup was used at times, but for it the patient had no special fondness.

Present Attack. In September, 1907, patient began to show an inclination to lie in bed and go without her food. She became indifferent, felt weak, run down, and complained of headache. During the winters of 1907-'08 she remained by herself a great deal; did not care to get up and dress. Had periods from a few hours to a day when she would not talk. During the summer of 1909 she complained of itching in the extremities, and had, what was considered, a severe sunburn on the extensor surfaces of her arms. In the summer of 1909 she became better mentally; was able to do some work away from home. In the fall she became more listless, and from September, 1909, to July, 1910, she remained in bed. During this time she complained of a burning sensation in the extremities, with the same mental symptoms above reported. About July 4, 1910, she got up voluntarily, but still complained of a burning sensation in her extremities. Four days later she went blueberrying; the sun was hot, she had her sleeves rolled up. That evening her forearms were sore. She thought they were sunburned. The following day white blisters appeared on the back of forearms and between the fingers. At this time she had a very sore mouth, called by her yellow canker (stomatitis.) This came on about two weeks after the rash first appeared. She also at this time had a diarrhœa. Since July she complained more of the pain and itching about her legs. In October she went to the ocean, standing in the water in bare feet to obtain relief from sensation of heat. It was about this time that she consulted Dr. Pudor, in Portland, who recognized the condition as

pellagra. She was committed to the Maine Insane Hospital, November 8, 1910, on account of marked mental symptoms. She had been sleeping poorly, had hallucinations of hearing, and had begun to go out of doors without her clothing, claiming she had been directed by God to do so.

Physical Examination. On admission was emaciated; height 5 feet, 5 inches. Weight 88 pounds. On backs of her hands and extensor surfaces of forearms was found a peculiar symmetrical discoloration. This area extended on extensor surface from the knuckles to about two inches below the bend of the elbow on each arm. It was of a light brownish tinge, sharply demarcated from the healthy skin. There were no abraded surfaces on the arms. On the dorsal surface of both feet were found several areas, irregularly circular in outline, varying in size from a ten cent piece to a silver dollar, where the superficial skin was eroded, leaving a raw, bleeding surface in places where crusts were formed. The skin between the patches was red and edematous. She complained of a burning, scalding, itching pain in her feet. On the right side of the neck about the collar line and below was a patch roughly triangular in shape, and about the size of the palm of the hand, which was discolored similar to the arms. The skin pigment was not increased in the normally pigmented locations except about the anus, where it was somewhat darker than usual. Mucous membrane of the mouth, tongue, fauces, and tonsils was abnormally red; papillæ raised. No ulcers in the mouth. Bowels constipated. She had a subjective feeling of dizziness; complained of frontal headaches, backache in lumbar region, shooting pains all over her. There was some hyperæsthesia on either side of the vertebral processes in the dorsal region. This area was poorly defined, irregular and inconstant. There was general muscular weakness. The neurological examination showed 80 per cent. hemoglobin; 3,920,000 red B. C.; 6,500 whites. The differential count was as follows: polynuclears 71 per cent., small lymphocytes 17 per cent., large lymphocytes 11 per cent., eosinophiles 1 per cent. Few poikilocytes and a few normoblasts.

Course of the Disease. The mental condition was a rather interesting one, which I will not attempt to analyze here, beyond stating that it had many features similar to the mental disturbances found in infection-exhaustion psychoses. The most troublesome feature during the early part of her stay in the hospital was the ulceration of her feet. This condition was aggravated by her persistent tendency to scratch. In December she was placed on hexamethylenamine, 5 grains, 3 times a day. The improvement in the condition of the skin and her general mental condition was rather remarkable. (I note that this remedy has been used with success in the South). She at times has been rather bright and alert, again for days has been as if in a dream. The pigmentation on the arms and neck has faded

and is now of a much lighter color. This spring there was considerable erythema about her knuckles but the tissue did not break down. She has not been exposed to sunlight. There has been no diarrhœa since her admission to the hospital; on the contrary, there is tendency to constipation. The condition of her tongue and mucous membrane of her mouth has improved.

The subject of pellagra is a momentous one. Four years ago it was generally unrecognized in the United States. In 1864 two cases were reported by Insane Asylum physicians, one in Massachusetts and one in New York. From that time until 1907, when a number of cases came to light in Alabama, very few cases were recognized. In 1908, there were in round numbers 1,000 cases reported. In 1909, approximately 5,000 were reported, and within the past four years we have records of pellagra in twenty-eight different states, the majority being found in the Southern states. I can find no record of any cases reported from New England since 1864. In April, 1910, the lay press reported a case in Burlington, Vermont, not as yet recorded in medical literature. The disease has become so prevalent in this country, that in 1909 a national conference was held in South Carolina to discuss the problem. The United States Government through the Medical Corps of the Army and the Public Health and Marine Hospital Service, has investigators at work, and the problem is no longer one of merely academic interest.

The fact that one isolated case has appeared in this state, is a warning to us to be on our guard, particularly as we have had a feeling of security, owing to the generally accepted belief that the disease could not originate in this latitude.

Attention is at present largely directed to the etiology of the disease, which is still an open question. For a century and a half it had been taught by many men of wide experience, that the disease bore some relation to spoiled corn, and this belief dominated the etiological field to such an extent, that investigation along other suggestive lines has only recently been undertaken.

C. H. Lavinder, of the Public Health and Marine Hospital Service, in October, 1909, summarized the various theories as to causation as follows:

"Broadly speaking, we may divide the theories as to the etiology of pellagra into two large groups, viz: those of the Zeists, who think there is some definite etiologic relation between Indian corn and pellagra, and those of the Antizeists, who oppose this view.

"In the latter group there is really but one body of students, and that is composed largely of the French school, who deny that pellagra is a morbid entity, and regard it only as a symptom complex, occurring in alcoholics, insane persons, and in persons in other depressed states.

"The Zeists include nearly all students of the disease, but their views are by no means harmonious. Putting it in a general way, their various ideas as to the etiology may be placed in three general divisions: 1. That it is an intoxication, (toxico-chemical); 2. That it is an auto-intoxication, (toxico-infective); 3. That it is a specific infection either by bacteria, molds, or protozoa. All these variations, however, it must be noted, take into more or less essential consideration the relation of the disease to corn; the intoxication, the auto-intoxication, or the infection, being in some more or less definite way regarded as usually connected with or derived from that grain.

"It must be added, however, that while in most of these theories corn is regarded as an essential factor in the etiology of the disease, in others this cereal is not regarded as an absolute necessity, although much importance may be attributed to it. (Ceni.)"

Hirschfelder, of Baltimore, made a series of skin tests with corn extracts in pellagra to ascertain whether pellagra was due to or accompanied by a condition of hypersensitiveness of the individual to products derived from good and from spoiled corn. These tests were made with substantially the same technic as that employed by V. Pirquet in tuberculosis, except that corn extracts were substituted for tuberculin in making the test. The extracts were made from samples of good corn, spoiled corn and spoiled corn containing *aspergillus fumigatus*. The reactions were all negative. There was a simple traumatic reaction of the same type as that found with the controls. As a result of his experiments, Hirschfelder thinks it highly improbable that such a condition of hypersensitiveness exists.

Raubitschek, at the institute for pathology and bacteriology at Czernowitz, made a series of experiments in applying the biologic, anaphylactic, serpiogic, deviation of complement and other tests. While his results were constantly negative he was led into further research, which seemed to him to show that pellagra and beriberi are the results of the action of some toxin in corn and rice which does not display any toxic action unless it is sensitized by the chemical rays of the sunlight. He was led to this conception of the origin of pellagra, as the action of an alimentary poison plus sunlight, by the experiences with white animals fed on buckwheat. Kept in the dark they remain healthy, while when exposed to the sunlight the hair dropped out and the animals became emaciated and soon died with symptoms of paralysis. This syndrome was not observed with the dark-colored animals or with those kept out of the sunshine. He explains pellagra consequently, as due to a toxin which develops in the parts of the skin exposed to the sunlight, from the action of the chemical rays on the lipoid, alcohol-soluble element in corn. The toxin developing in the skin causes the superficial lesions and has also injurious systemic action.

J. D. Long, of the Public Health and Marine Hospital Service, who has done work on pellagra in South Carolina, was struck by the resemblance of the disease to amebiasis (amebic dysentery) and he formulated an ingenious working hypothesis, which has not, however, withstood investigation. He assumed that pellagra is a disease resulting from an injury to the intestinal mucous membrane, produced by the ameba. As a result of the ulceration, there is an inflammatory process extending throughout the alimentary tract which interferes with the absorptive power of the intestine and the manufacture of the digestive ferments normally produced in the intestines. Later, owing to a long continued inflammation of the intestine, the pancreas and the liver undergo inflammatory changes which interfere with the quality and quantity of the digestive juices that they produce, with the result that the food ingested is improperly digested. The presence in the intestine of undigested food favors fermentation and putrefaction of its elements with the production of certain toxins, ptomains and interminate products of digestion which are harmful to the body. The insanity of pellagra was assumed to be due to the severe and long continued toxæmia. The lesions on the hands, neck, feet, face and genitalia were assumed to be due to two factors: First, the mechanical pressure on the nerves at their exit from the spinal canal, and second, the degeneration of the nerves themselves as a result of the toxæmia. Long in his investigations found many insane pellagrins with amebiasis, but he also found many sane cases equally infected with amœbas but without symptoms of pellagra.

The association of amœbæ and hook worms with pellagra is common, but the attempt to associate them as cause and effects is as yet premature.

The theory which at present is attracting most attention is that of Dr. Louis W. Sambon, lecturer on tropical medicine at the Liverpool School of Tropical Medicine. Sambon in 1905, stated that he believed the disease to be caused by a protozoal parasite, probably transmitted by some blood-sucking insect. In 1910 he was sent by the British Commission for the Study of Pellagra, to investigate the disease in Italy, and he has since announced his conviction that the disease is transmitted to each individual by an infected sand fly, the *Simulium reptans*, though he has failed to find the actual organism. As proof that pellagra is conveyed by the sand fly, he maintains that the *Simulium* is found in the swift running streams of all pellagra districts; it has the peculiar seasonal distribution of pellagra; it is found only in rural districts. It is found where pellagra is found, and is the only blood-sucking insect which the British field commission has found in its visits to numerous pellagrous districts in Italy; It has a world wide distribution and explains the wide distribution of pellagra: It causes epi-zootics in animals in America and Europe.

Against the maize theory he offers the following five propositions:

1. Pellagra is found in places where maize is neither cultivated nor eaten.
2. It is absent from many places where maize is the staple food of the population.
3. It has in many places either decreased or become more prevalent without any change in the food of the people.
4. Its constant and peculiar distribution does not agree with the very irregular and ever changing distribution of spoiled maize.
5. Since the maize theory was first suggested, no one has been able to prove it.

Dr. Babcock, of Columbia, South Carolina, who has drawn attention to the disease in this country more than any other man, tersely sums up the situation as follows: "I think the deeper one gets into the pellagra problem, the less inclined he is to dogmatize about it; but I have seen enough of the disease to claim authority to put it in the same class as General Sherman placed war."

THE AMMONIA COEFFICIENT AS AN INDICATION FOR EMPTYING THE UTERUS IN TOXEMIA OF PREGNANCY.

BY JOSEPH B. DRUMMOND, M. D., OF PORTLAND.

(Read before the Ægis Medical Club of Portland, October 10, 1911.)

In 1907, Williams, of Baltimore, first called attention to the increase of the ammonia content of the urine in all cases of toxemia of pregnancy. He regards this increase of ammonia as a positive diagnostic sign of a toxemia of pregnancy and in this way differentiates toxemic from neurotic disturbances. He advises that the uterus be emptied whenever the ammonia coefficient continues to rise and reaches 10 per cent.

Williams, Stone, Ewing and C. N. Langridge found that distinct and constant pathological lesions, consisting of fatty degeneration and necrosis of the central portion of the lobules of the liver, were present in all these cases which came to autopsy under their supervision. Williams believes that the essential process is not the changes in the liver but rather an underlying toxemia to which they and the urinary changes are due.

Most observers have upheld his statements that it is advisable to empty the uterus when the ammonia coefficient is as high as 10 per cent. and rising, and also they agree that there is no increase in the ammonia in cases of neurotic and reflex disturbance, but Edgar, Norris and others report cases, which they believed to be a true toxemia of this form, in which there was no rise in the ammonia coefficient.

The ammonia in the body is derived from the proteid molecule which undergoes cleavage in the alimentary canal as far as albumose. It is then hydrolized and split up into the amino acids, from which the ammonia acids are split off and carried to the liver. In the liver nearly all the ammonia is changed to urea and excreted. The normal ammonia coefficient is considered as 4.65 per cent. of the total nitrogen excreted in the urine.

The ammonia in the urine is increased in any condition in which there is an increase of acids in the body, such as in diabetic acidosis, because the ammonia normally formed, instead of being changed to urea, combines with the excessive acids to neutralize them and is excreted as the ammonium salts of these acids. It is also increased when the proteids of the diet are increased at the expense of the carbohydrates, because the proteids furnish an acid ash. A pathological breaking down of the tissues causes an increase of the ammonia excretion, as this is equivalent to an increased proteid catabolism. Lastly, any interference with the liver, such as occurs in acute yellow atrophy, lessens the output of urea and so causes an increase of ammonia in the blood.

I have examined the urine for ammonia in a number of cases of toxemia of pregnancy or suspected toxemia, and it is significant that the increase of the ammonia coefficient, in cases of which I knew nothing of the clinical history, has corresponded with the gravity of the patient's condition as judged from a physical examination.

For example, in three cases, in which I had simply the urine, with no history of the case, the ammonia coefficients were 21 per cent., 16.2 per cent. and 19.3 per cent., and upon making my reports to the attending physicians, I found that these patients presented well marked symptoms of toxemia and that the condition in all three cases was considered as very serious by the attending physicians,—so serious that in one case the uterus was emptied before the physician received my report. In another case I found an ammonia coefficient of 6.06 per cent., and upon telephoning my result to the physician in a neighboring town I found the only symptoms this patient showed were a slightly increased blood pressure and a very faint trace of albumen, with a few casts in the urine.

It is interesting to follow the decrease of ammonia after the woman is delivered. This case illustrates it very nicely.

Mrs. T. Primipara, age 23, with persistent vomiting for several weeks.

February 24.	Ammonia,	9.2 per cent.
" 25.	"	13.01 per cent.
" 26.	"	Uterus emptied.
" 27.	"	4.7 per cent.
" 28.	"	4.3 per cent.

Follins' method of determining the ammonia was employed in all cases.

Finally, an increased ammonia coefficient indicates a serious change in nitrogenous metabolism. It is an index of the gravity of the toxemia of pregnancy; it is of diagnostic value in determining the toxic or neurotic origin of the disturbance of pregnancy, and is of diagnostic value in acute yellow atrophy of the liver. An examination for it is of great importance in all of these cases which give rise to anxiety on the part of the physician, not only on account of its diagnostic value, but also on account of the positive indication for treatment which it affords.

A CASE OF PLACENTA PRAEVIA COMPLICATED BY TWINS.

CASE REPORT BY EDSON S. CUMMINGS, M. D., OF LEWISTON.

I report this case because of its comparative rarity, as Edgar says that "twins occur once in ninety, and placenta praevia once in one thousand."

The patient, Mrs. G., aged 34, is the mother of six children, four living, the oldest being twelve and the youngest two and one-half. One child was born at seven and one-half months, and weighed one and one-half pounds. She had had one miscarriage at three months. The date of her last menstruation was July 8, 1910.

After having worked hard all the day before, at three A. M., January 17, 1911, she had a profuse uterine hemorrhage, losing about a quart of blood. In three or four days she went to work about the house again, and in about a month had another hemorrhage, losing nearly the same amount of blood. As soon as she recovered from this, she went to the C. M. G. Hospital, at the advice of her physician. She was examined and a diagnosis of placenta praevia having been made, advised to remain at the hospital. As she was so near the seventh month the physician on duty advised waiting until then before bringing on labor, as she would be where she could be attended to immediately if any dangerous hemorrhage occurred. The patient would not consent to this, and went home on her own responsibility. The next day, after arriving home, she had another hemorrhage, losing in the neighborhood of a pint of blood, and the day following returned to the hospital.

I went on duty March 1st, and the patient came under my care. She had had no more hemorrhages up to this time, and on examination I was able to get one finger into the os and feel the edge of the placenta overlapping the left side of the internal os. The patient was kept in bed, and

March 11th, I decided that it was dangerous to wait longer, and at nine A. M. on that date tamponned the cervix and the vagina. At nine P. M., I visited the patient and found that she had had but two or three pains. I started to remove the tampons preparatory to a douche and re-tamponning, when pains began.

On the removal of the cervical tampon, I found, on examination, dilatation to the size of a silver dollar, with the membranes protruding and the placenta covering nearly one-half of the os. I ordered the patient etherized preparatory to podalic version, but the patient had taken but a few inhalations when she had an alarming hemorrhage which demanded immediate action. I ruptured the membranes, seized a foot, and in a very short time delivered a four and one-half pound baby. I then separated what little of the placenta remained attached and delivered it. On introducing my hand into the uterus to see if it was entirely emptied, it came in contact with another head. I grasped this with my hand and extracted another baby weighing three and one-half pounds. The cord hung back, and thinking that I might have a separate placenta I explored the uterus again but found only some of the membranes attached to the cord. I next gave an intra-uterine douche and a hypodermic of ergotole. There was no further hemorrhage. Normal salt enemata, one pint every four hours, were given for the next twelve hours, and the foot of the bed was elevated. Both babies were born alive but one lived only until about two A. M., the smaller one. Autopsy showed nothing abnormal except the sigmoid, which was a mere cord and would admit only a probe. The other baby lived about a week, weakening gradually. There was no autopsy. The mother did well until the twenty-first, when she showed signs of a mild infection. This lasted until April 2d, when the temperature became normal and remained there. The patient was discharged April 8th, in good condition.

SURGICAL SUGGESTIONS.

A peritonsillar abscess as a rule is more painful than serious. But one should not forget that patients have died of suffocation and that erosion of a vessel may take place in the wall of the cavity and cause death.

[*American Journal of Surgery.*]

Repeated attacks of "hyperacidity" usually mean gastric or duodenal ulcer—gastric, if the pain is one hour or less after eating; duodenal, if three hours or more after eating (Moynihan's "hunger pain"), and probably pyloric if about two hours after eating.

[*American Journal of Surgery.*]

Necrology.

JAMES ENOCH TUELL.

James Enoch Tuell, a leading physician at Augusta, Maine, and long a member of the State Medical Association, died at his home February 11, 1911, at the age of 56. Dr. Tuell was born in East Machias, Maine, Jan. 25, 1854, the son of James Leonard Tuell and Julia Bamford, his wife.

After studies in the village school and at Bucksport, Maine, Academy, he studied medicine with the local physician, and then was graduated at the Jefferson Medical School of Philadelphia, in 1884. He practiced very successfully for ten years or thereabouts in his native place, but looking for a wider field of influence he removed to Augusta in 1893, where he soon obtained a solid practice, and became influential in medicine.

He belonged to the board of health, was an interested member of our Association, belonged also to the American Medical Association and to numerous local medical and masonic societies. He did much excellent, careful, and conservative surgical and medical work at the Augusta Hospital, upon the staff of which he was appointed at its foundation, and which appointment he held to the end of his life.

Dr. Tuell was a genial, kindly man, was twice married, and leaves a widow and children.

J. A. S.

EDWARD GOODELL LARRABEE.

Dr. Edward Goodell Larrabee, one of the youngest members of our Association and a physician of great promise, died of tuberculosis early in the year 1911. He was born in 1887, and was in his twenty-fourth year when he died. After study in the schools of Auburn, Maine, he was graduated at the Dartmouth Medical School in 1909. During the summer of that year he took personal care of his father, who was suffering from tuberculosis, and whilst thus filially employed, he personally contracted the dreaded disease. He had in the meanwhile received an appointment as House Physician to the Central Maine General Hospital, but realizing his condition he regretfully resigned this promising opening, and put himself under the personal care of Dr. Estes Nichols at the Sanatorium at Hebron. Here he hoped, also, to obtain an appointment as House Physician, whilst being under treatment himself, but he failed to improve, abandoned any hope for further practice, and gradually passed away, leaving the pleasant memory of a life of promise in medicine.

J. A. S.

JEAN LOUIS FORTIER.

Jean Louis Fortier, Doctor of Medicine, and an untiring member of our Association, and resident and practitioner in Waterville, Maine, was born at St. Sylvestre de Lotbiniere in the Province of Quebec, Canada, March 29, 1853, and died in his home at Waterville June 4, 1911. He finished his classical studies in a Canadian Academy, and then migrating to Waterville studied medicine in the office of Dr. H. H. Campbell in that city. He also attended medical lectures at the Medical School of Maine, from which he was graduated with honor in 1883. He returned at once to Waterville and soon obtained and maintained for years a very extensive practice, not only amongst the French operatives in the mills, but amongst the native population.

Dr. Fortier was a man of immense activity in the social and political life of Waterville, belonged to a large number of social and benevolent institutions, and held many offices, both state and municipal. At the time of his death he was a Trustee of the Waterville Library. He was a man of great brilliancy, much admired for his medical skill, and highly thought of as a citizen, and benefactor to the poor and needy.

He was twice married; first to Miss Louise Martel, who died several years ago, and later on to Miss Marguerite Dunn, of Lewiston, who survives him.

J. A. S.

SURGICAL SUGGESTIONS.

The healing of a mastoid wound is often hastened by fewer dressings and allowing Nature to do her part in the reparative process.

[*American Journal of Surgery.*]

A severe sore feeling in the throat is frequently complained of by nervous individuals. Close inspection will show numerous fine white spots surrounded by a red areola—herpes.

[*American Journal of Surgery.*]

Pressure from a mediastinal tumor or enlarged tubercular glands will often give rise to an irritative condition of the throat which can in no way be relieved by local measures.

[*American Journal of Surgery.*]

JOURNAL OF MAINE MEDICAL ASSOCIATION.

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Editorial Comment.

The Ammonia Coefficient in the Vomiting of Pregnancy.

Much research has been carried on during the past few years, in the investigation of the pathological chemistry, obtaining in certain of the obscure toxæmias. From the view point of the obstetrician, the work of Williams of Johns Hopkins, relative to the ammonia coefficient in the toxæmic vomiting of pregnancy, has attracted much attention.

The studies of Williams showed that in the vomiting of pregnancy of the toxic variety there occurred a decided increase of the ammonia output, as measured in the urine, from a normal of 4 to 5 per cent., to 10, 20, or even 50 per cent., this condition being associated with degenerative changes in the liver and kidneys, especially the former.

Classifying the vomiting of pregnancy under three heads: the reflex, the neurotic and the toxæmic, he called attention to the fact that the increased ammonia output constituted the diagnostic symptom, that would suffice to differentiate the neurotic from the toxæmic variety. This, however has not been conceded by some other distinguished workers along this line.

Later studies by Williams himself do not altogether bear out his former views, as he has found that in certain other conditions, notably prolonged starvation, the ammonia output is also increased. This obviously might obtain in the neurotic as well as the toxic types. It is well known that in the neurotic variety the condition of the patient may become extreme and yet

sudden improvement follow a change in hygienic, suggestive or medicinal treatment.

In the toxic form the emptying of the gravid uterus as soon as the condition is determined constitutes the well recognized treatment, and may, but does not always, succeed in preventing the degenerative changes advancing.

In view of the present status of the question, one would scarcely be justified in electing to induce abortion in accordance with the ammonia output without at least the coincidence of all those grave symptoms which in the past have presented the deciding factor in such cases.

Peroxides of Metals versus Hydrogen Peroxide.

We are strongly of the opinion that physicians who place their dependence on a few drugs with the action of which they are thoroughly conversant will be more successful than those who are constantly trying new things and use none long enough and with sufficient discrimination to become familiar with the action of any. On the other hand physicians who ignore new remedies altogether are out of touch with progress in medicine. It therefore behooves all who would not drop behind to keep themselves conversant with the newer medicinal substances, at least, in a general way. To such physicians we can recommend the careful and concise descriptions which are published by the Council on Pharmacy and Chemistry of the American Medical Association under "New and Non-official Remedies." As an illustration we publish below (on another page) a discussion of the metallic peroxides proposed as substitutes for the well known hydrogen peroxide solution, which appeared under "New and Non-official Remedies" in The Journal of the American Medical Association, October 7, 1911, p. 1209, and which was followed by a description of the individual peroxides which the Council has examined and found to be of good quality.

W. A. P.

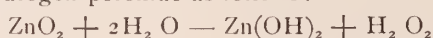
Report of Council of Pharmacy and Chemistry.

PEROXIDES OF METALS.

Metallic peroxides are compounds in which the hydrogen of hydrogen peroxide has been replaced by metals, and which are readily decomposed with liberation of hydrogen peroxide, or of oxygen in an active state. The peroxides of several metals have been suggested as substitutes for the hydrogen peroxide solution, official as aqua hydrogenii dioxidi.

The commercial products are usually mixtures containing but a limited amount of real peroxide; for example, commercial "magnesium peroxide" contains but about 15 per cent. of magnesium peroxide, while commercial "sodium peroxide" contains about 75 per cent. of sodium peroxide.

The different peroxides vary considerably in their stability, their solubility and in their ease of decomposition in solution. In solutions of acids the peroxides are decomposed, forming hydrogen peroxide and the salt of the metallic radicle of the peroxide. In this way the entire active oxygen-content of the peroxide is quickly made available in the form of hydrogen peroxide in solution. Water dissolves only minute quantities of these peroxides, but it decomposes them with varying degrees of readiness. Thus zinc peroxide, although very insoluble, is decomposed by water into zinc hydroxide and hydrogen peroxide as follows:



The energy of the oxidizing powers of different peroxides varies in direct ratio to the alkalinity of the solution produced in their decomposition. The variation in the alkalinity of the solutions formed affects the therapeutic uses of the peroxide. Sodium peroxide is not desirable for therapeutic use because of the formation of the strongly alkaline solution of sodium hydroxide (caustic soda). Magnesium and zinc peroxide, on the other hand, yield weakly alkaline solutions and are for that reason more desirable.

Actions and Uses.—Like hydrogen peroxide, the metallic peroxides depend for their value on the readiness with which a part of their oxygen becomes active. They are claimed to possess advantages over solution of hydrogen peroxide, because the oxygen is set free more gradually. Among themselves the metallic peroxides differ in their action in accordance with their solubility and the alkalinity produced by interaction of the peroxide with water. The action of peroxides is also affected by the nature of the metal which goes into solution when the peroxide is decomposed. Thus the use of sodium peroxide is limited by the strong base formed when it dissolves in water and that of zinc peroxide by the poisonous action of zinc solutions.

Because of the strong oxidizing effects on the lower organisms, the peroxides have been recommended as a convenient means of sterilizing water, thus a mixture has been used containing magnesium peroxide 0.2 Gm. and tartaric acid 0.5 Gm., the latter favoring the decomposition of the peroxide. It has been proposed to employ the oxidizing effect of peroxides in the treatment of skin diseases, by using a mixture of zinc peroxide, 10 parts; potassium iodide, 5 parts, and tartaric acid, 1 part, from which, on contact with moisture, iodine is gradually liberated. As an ingredient of dentifrices, magnesium and strontium peroxide have been used.

Internally the peroxides have been claimed to be of value as gastric and intestinal antiseptics and to be of use in the treatment of acid dyspepsia, abnormal fermentation and summer diarrhœa of infants.

Abstracts of Current Literature.

William L. Cousins, M. D.,	P. P. Thompson, M. D.,	Edwin W. Gehring, M. D.
A. H. Weeks, M. D.,	Frank W. Lamb, M. D.,	C. R. Burr, M. D.,
T. J. Burrage, M. D.,	Harold J. Everett, M. D.,	W. Bean Moulton, M. D.,
Roland B. Moore, M. D.,	H. A. Pingree, M. D.,	Fred. P. Webster, M. D.,
F. J. Welch, M. D.,	Frank Y. Gilbert, M. D.,	F. W. Davis, M. D.,
		H. E. Milliken, M. D.

(The American Journal of Orthopedic Surgery, August, 1911.)

Results Obtained From The Use of Tuberculin in Joint Tuberculosis. By George B. Packard, M. D., Denver, Colorado.

The author points out the advantages of the use of tuberculin emulsion in the treatment of tuberculous bone disease. He maintains that it should be used only as an adjunct to mechanical or other surgical measures. He thinks that most children have sufficient recuperative powers to contraindicate its use, but that adults, having the disease for long periods, and possessing less resistance, are benefited by the use of tuberculin. He says that the discharge from the sinuses is generally temporarily increased and that sometimes numerous collections of fluid appear in different parts of the body and at the site of lesions.

He reports 12 cases of various ages and degrees of disease, in the majority of which tuberculin has been administered and followed by satisfactory results. But it is not clear whether the results were due any more to the emulsion than to the mechanical treatment, plus outdoor life, climate, and food.

The dose ranges from 1/64000 mg. to 1/1000 mg.

He concludes by saying that the use of tuberculin should not be a routine measure and should be used only in those cases where the general condition is not satisfactory, or where the disease is active or progressive.

H. A. PINGREE.

(The American Journal of the Medical Sciences, October, 1911.)

The Specificity, Danger, and Accuracy of the Tuberculin Tests. By Lawrason Brown, M. D.

This article draws up certain conclusions in the use of tuberculin for diagnosis.

1. *The Specificity.* Experimentally it has been proved that only those animals react to tuberculin that are tuberculous. Infants apparently healthy fail to react even to 1000 mg. Koch required 250 mg. to make him react.

Syphilis and other diseases are not specific to tuberculin. Reactions indicate double infection. A slight tuberculous infection may cause reaction and leave no permanent pathological change. Leprosy is the exception. Tuberculin is specific here, causing a later reaction, which lasts longer than in tuberculosis. Sensitiveness to the tuberculin tests cannot be produced in healthy individuals. A slight reaction to a small dose any time during treatment would be sufficient proof that the patient had had a tuberculous infection.

2. *Danger of Tuberculin.* The conjunctival test has produced a number of unfortunate complications, such as corneal opacity. If carefully given and in selected cases the test is comparatively safe. Avoid this test in children.

The cutaneous test has produced lymphangitis with swelling of glands, also extensive ecchymosis. General reactions have followed. Dangers are very slight and not to be considered, except in scrofulous children.

The subcutaneous test has produced a slight temperature, persistent for months, and also expectoration, when absent. Any apparent connection between the test and the occurrence of tubercle bacilli in the sputum following, is coincidence.

3. *Focal Reaction in Lungs.* An increase of physical signs occurred in the lungs in one-third of those examined during and after the reaction. Symptoms occur equally in those with and without increase of physical signs.

4. *Value of the Tuberculin Test.* Tuberculosis is divided into non-clinical and clinical. Clinical may be masked, active, quiescent or arrested. Tuberculin reaction may be positive in a large number of healthy, middle aged men. It possesses no significance in health. Failure to react to 10 mg. old tuberculin does not exclude clinical tuberculosis, but in the presence of indefinite symptoms indicates that treatment is unnecessary. A negative subcutaneous test in a tuberculous patient may indicate either absence of receptors at site of lesion or the presence of free antibodies in blood.

The cutaneous test is of value in early life. After seven or eight years a positive reaction is of little value to differentiate tuberculous infection and clinical tuberculosis. A negative reaction doesn't exclude these and may indicate as above, lack of sessile receptors. The more nearly the technique approaches vaccination the more reliable the results. The intradermic test is more valuable than the conjunctival or cutaneous; the subcutaneous, most reliable of all.

Practically, exposure to infection, clinical symptoms, such as hemoptysis, pleurisy with effusion, dry pleurisy on both sides, localized persistent physical signs at one apex are diagnostic data of more significance than that from the tuberculin tests.

F. J. WELCH.

(New York Medical Journal, Saturday, October 7, 1911.)

Further Experience in Ex-Ray Diagnosis of Ulcer of the Stomach and Duodenum. By Harry Adler, M. D. and Howard E. Ashbury, M. D., Baltimore, Maryland.

The authors have used this method on seventy-five cases of gastric and duodenal ulcers.

The principle of the method is based upon the idea that the crater of an ulcer will retain a salt of bismuth after the normal mucosa has been cleared of it by the peristaltic action of the stomach and intestine.

The cause of the bismuth retention may be explained in one or both of two ways :

First, to a deposit of the bismuth in the ulcer, being held there by some glutinous substance as blood or pus ; second, by a deposit around the edges of the ulcers due to a lessened peristalsis in its vicinity.

The authors prepare the patient as follows :

A laxative is advisable twenty-four hours before the examination, at which time light or liquid diet should be ordered ; twelve hours before the first bismuth is taken, all food and liquids are restricted by mouth, then ninety grains of the subcarbonate of bismuth is given in two ounces of water.

The first skiagraph is taken within from 4 to 6 hours thereafter, this interval representing the normal clearance or the time for a normal stomach to empty itself.

As soon as the first plate is known to be satisfactory, the patient is given a mixture containing : bismuth subcarb and powdered acacia *aa.* $1\frac{1}{2}$ ounces, peppermint water 2 oz., water *ad.* 16 ounces, and a second exposure made. This gives the outline of the stomach and by comparison with No. 1 shows whether the ulcer is in the stomach or in the duodenum.

The authors reach the following conclusions :

1st. The retention of bismuth, given according to our method, for a period over four hours, signifies a pathological condition other than mere displacement.

2d. The absence of the bismuth shadow from the stomach area, excepting in small isolated spots, is not due to stenosis or simple dilatation, but to ulcer.

3d. While we believe the use of the X-ray to be a distinct advance in ulcer diagnosis, we do not feel that it should be looked upon as giving by itself a final verdict, but rather should bear weighty evidence when taken in conjunction with other clinical data.

(New York Medical Journal, Saturday, October 21, 1911.)

Experimental Poliomyelitis Produced in Monkeys From The Dust of The Sick Room. By M. Neustædter and William C. Thro.

After giving the opinions of various investigators on the causation of poliomyelitis the authors say,—“The theory, which we are now in a position to prove, was based on the following facts:

“1. The disease is eminently an infantile one, occurring in dry seasons.

“2. The character of the neighborhood and of the living premises, when it occurs, plays no material part in the spread of the disease; in other words, it can occur anywhere.

“3. Several children in the same family may be attacked successively. In a given house, children of different families are attacked in fairly quick succession, and along lines of neighborly communication.”

From these facts, the authors concluded that the virus lurks in the dust, and that it must be contagious. Sweepings were obtained from rooms where there were or had been cases of poliomyelitis, and an extract made by macerating with normal salt solution for a few days and then filtering through a Berkfeld filter. This extract was injected into the ventricles of the brain through a trephine opening. In three of the six monkeys injected, paralysis developed and a pathological examination showed poliomyelitis.

The authors' conclusions are:

Poliomyelitis is propagated by dust, and we may also conclude that the naso pharynx probably is the point of entrance, and that acute poliomyelitis is both infectious and contagious.

F. W. L.

SURGICAL SUGGESTIONS.

The treatment of varicose veins is not completed until the surgeon has discovered the constitutional causative factor and advised its elimination. *[American Journal of Surgery.]*

In removing extensive varicose veins, the surgeon should bear in mind that two operators can accomplish twice as much as one.

[American Journal of Surgery.]

BOOK REVIEW.

Anatomy. A Manual for Students and Practitioners. By John F. Little, M. D., of the Jefferson Medical College, Philadelphia. New (2d) edition, enlarged and thoroughly revised. 12 mo. 491 pages, with 75 engravings. *Double number.* Cloth, \$1.50, net. *The Medical Epitome Series.* Lea & Febiger, Publishers, Philadelphia and New York, 1911.

Dr. Little is the third anatomist who has edited this work. The constant demand for books of this class is an evidence of their usefulness. This manual is remarkably well written and, on the whole, accurate, containing very few of the traditional errors that have been copied from one text book of anatomy to another. It is understood that a book of this class should agree, in the main, with certain of the larger and more comprehensive treatises. Nevertheless the editor has introduced many valuable anatomical facts not commonly mentioned in books of this size.

The Basle Anatomical Nomenclature has been practically disregarded. This is significant; for while this Epitome may not rank as authoritative it probably is representative in this particular respect. When the new nomenclature reaches anything approaching universal adoption (if it ever does), it will certainly find a place in books on anatomy that are made to sell. It is to be hoped that Dr. Little may have an opportunity to enlarge this manual, in a later edition.

W. E. T.

ARMY MEDICAL CORPS EXAMINATIONS.

The Surgeon General of the Army announces that preliminary examinations for the appointment of first lieutenants in the Army Medical Corps will be held on January 15, 1912, at points to be hereafter designated.

Full information concerning these examinations can be procured upon application to the "Surgeon General, U. S. Army, Washington, D. C." The essential requirements to securing an invitation are that the applicant shall be a citizen of the United States, shall be between 22 and 30 years of age, a graduate of a medical school legally authorized to confer the degree of doctor of medicine, shall be of good moral character and habits, and shall have had at least one year's hospital training as an interne, after graduation. The examinations will be held concurrently throughout the country at points where boards can be convened. Due consideration will

be given to localities from which applications are received, in order to lessen the traveling expenses of applicants as much as possible.

The examination in subjects of general education (mathematics, geography, history, general literature, and Latin) may be omitted in the case of applicants holding diplomas from reputable literary or scientific colleges, normal schools or high schools, or graduates of medical schools which require an entrance examination satisfactory to the faculty of the Army Medical School.

In order to perfect all necessary arrangements for the examination, applications must be complete and in possession of The Adjutant General at least three weeks before the date of examination. Early attention is therefore enjoined upon all intending applicants. There are at present thirty-four vacancies in the Medical Corps of the Army.

ANTIDIPHThERIC SERUM AND GLOBULINS.

In their current announcements to the medical profession it is noted that Parke, Davis & Co. give equal prominence to their antidiphtheric serum, which they have produced unchanged for many years, and the newer "globulins," which they have been marketing for a number of seasons.

The globulins, as is perhaps known to most practitioners, is antidiphtheric serum with the non-essential portions eliminated. Compared with the normal serum it provides a corresponding number of antitoxic units in lesser bulk, permitting in consequence a smaller dose, which probably accounts for its apparent growth in favor among physicians.

Both the natural and concentrated products, of course, bear the company's guaranty of purity and efficacy. They are evolved in the blood of healthy, vigorous horses and are prepared under the supervision of expert bacteriologists and veterinarians. The tests, bacteriological and physiological, to which they are subjected during the process of manufacture, are thorough and elaborate.

County News.

CUMBERLAND.

CUMBERLAND COUNTY MEDICAL SOCIETY.

The annual meeting of the Cumberland County Medical Society will be held in Portland, Friday evening, December 8th. Dr. W. Gilman Thompson, of New York, Professor of Medicine at Cornell Medical School, will read the address, the subject being "The Occupation Diseases of Modern Life." A banquet will be served previous to the paper.

All members of the Maine Medical Association are cordially invited to attend, and it is requested that those wishing to come will notify the Secretary of the Society, Dr. Philip P. Thompson, 704 Congress St., Portland, Me.

The Medical Review Club was organized, with Dr. William L. Cousins, Honorary President, Dr. A. H. Weeks, President, and Dr. H. E. Milliken, Secretary.

PHILIP P. THOMPSON, *Secretary*.

PORTLAND MEDICAL CLUB.

The regular meeting of the Portland Medical Club was held November 2d, at the Columbia Hotel. Twenty-nine members present.

Drs. M. C. Webber, M. A. Webber and N. M. Marshall were elected to membership.

Drs. Folsom and Fisher were elected members of the nominating committee for next year.

Drs. Driscoll and Warren gave the past history and the present condition of a patient whose first living child of seven pregnancies was delivered by Cæsarean section.

The Essay of the evening was by Dr. S. J. Bassford on "Photo Therapy." He said:

The well known and proven life-sustaining property of light has made it ideal as a therapeutic agent, and the higher frequencies of vibration are shown to have the actinic properties more markedly. The source of light determines to a great extent its character. By experimentation the X-Ray is shown to inhibit growth, while sunlight stimulates it.

Electricity is employed as a source of light, and this light is rich in the higher frequency of vibration, and the incandescent is preferable to the arc, as there is less tanning. A reflector is used, and different arrangements

and applications according to the result desired, blue light being used for local, white for general effects.

Application of light gives a betterment of metabolism generally, to the skin a hyperemia, a relief of stasis, and destruction of germ life. The Finsen light is used on a part previously rendered anæmic, for its destructive effect, followed by the stimulating white or blue light.

The essayist called special attention to the use of applications of a 100 c. p. blue light for from 30 to 45 minutes in herpes zoster, claiming this method of treatment almost a specific for the disease.

An interesting discussion followed the paper, and the Club adjourned at 9:20 P. M.

On account of the meetings of the County Association and the Portland Medical Club coming on successive evenings, the latter will be put off until Tuesday evening, December 5th. It will take place at the Falmouth Hotel at 7:30 o'clock.

H. J. EVERETT, *Secretary*.

WESTBROOK MEDICAL CLUB.

The Westbrook Medical Club held its regular meeting at the home of Dr. A. N. Witham.

The paper of the evening was presented by Dr. Thomas J. Burrage, of Portland.

Dr. Burrage dwelt closely on the report of several cases of rheumatoid arthritis in which he had used the lactic acid treatment. Many of these cases received marked benefit from the treatment. It was an intensely interesting paper.

Dr. L. L. Hills extended an invitation to the Club to hold its December meeting at his residence.

F. L. FERREN, *Secretary*.

ANDROSCOGGIN.

The regular meeting of Androscoggin County Medical Society was held Tuesday evening, November 7th, at 8 P. M.

Dr. John Sturgis read a paper on "Pleurisy" and it was discussed by all the members present.

The next meeting, which takes place in December, is the annual meeting, and there will be an election of officers.

Fifteen members were present. JOSEPH W. SCANNELL, *Secretary*.

KENNEBEC.**WATERVILLE CLINICAL SOCIETY.**

The regular meeting of the Waterville Clinical Society was held at the Bay View Hotel, November 20th. The paper of the evening was presented by Dr. A. S. Fletcher. Subject, "Surgical After-Care." A banquet was served.

EDSON E. GOODRICH, *Secretary*.

PENOBSCOT.

The fifty-eighth annual meeting of the Penobscot County Medical Association was held at the Bangor House, Bangor, Tuesday evening, November the twenty-first.

The following amendment to the Constitution was passed :

That the so-called Homeopathic Physicians in Penobscot County be eligible to membership in the Penobscot County Medical Association upon the same conditions as other physicians are eligible. Providing, however, that they cease to use any distinctive method of advertising themselves as such, shall cease to use the distinctive term "Homeopathic" or graduate of the Hohnemann School of Medicine upon their cards, letter heads, bill heads or signs.

The officers elected for the coming year were: President, H. T. Clough; Vice President, George L. Landry; Treasurer, H. H. Crane; Secretary, J. B. Thompson; Board of Censors, E. B. Sanger.

After a very nice supper, our retiring President, Dr. A. Lethiecq, presented a paper entitled, "A Plea for More Accurate Diagnosis." It was of great interest and was discussed generally by those present. Dr. F. Y. Gilbert, of Portland, was present and made plain to us the Resolutions on Medical Charities, Insurance, etc.

A very pleasant evening was passed and the meeting closed at a late hour. Two new members were voted in, Drs. James P. Russell and Charles J. Nason.

JOHN B. THOMPSON, *Secretary*.

WASHINGTON.

The committee of three, appointed at the last meeting of the Maine Medical Association to consider bringing before the laity the subject of

Hydroleine

It offends no palate.

Hydroleine is exceptionally digestible.

Made from pure Norwegian cod-liver oil, emulsified after a scientific formula by approved processes.

Hydroleine has received the approval of physicians because — thoroughly dependable, without medicinal admixture—it can be used in *every* case in which cod-liver oil is indicated. Sold by druggists.

THE CHARLES N. CRITTENTON CO.
115 Fulton Street, New York
Sample will be sent to physicians on request.

cancer, have arranged through the Washington County Medical Society, for a symposium on that subject following the regular December meeting. The idea is to hold a public meeting in the evening following the regular Society meeting. In the afternoon the Society will have papers read by J. R. C. Byron, M. D., of Eastport, Vincent Sullivan, M. D., of St. Stephen, New Brunswick, and H. H. Best, M. D., of Pembroke. These men will discuss cancer in its various aspects. During the evening a meeting will be held in one of our large public halls, at which Frank H. Jackson, M. D., of Houlton, and M. L. Young, M. D., of Oak Bay, New Brunswick, will deliver papers on this subject of interest to the laity. There will also be a number of ad-

dressess by prominent citizens. It is the idea of the Society to make this meeting as interesting as possible to the laity, and at the same time to bring before them the importance of an early diagnosis and treatment of this disease. After the evening session a banquet will be given to all visiting physicians, by the St. Croix Medical Society. A good time is expected.

W. N. MINER, *Secretary*.

PERSONAL NEWS AND NOTES.

Dr. W. L. Cousins, of Portland, attended the Congress of Clinical Surgeons in Philadelphia.

Drs. E. E. Holt and E. E. Holt, Jr., of Portland, have returned from a trip to Philadelphia.

Dr. Addison Thayer, of Portland, is confined to his home with an attack of sciatica.

Dr. Chauncey R. Burr, of Portland, was recently called to Washington

GASTRO-INTESTINAL DISEASES

are usually more severe and intractable to treatment during the summer months.

Through the prompt use, however, of

Gray's Glycerine Tonic Comp.

and careful regulation of the diet, it is always possible to control in short order, even severe attacks of entero-colitis, summer diarrhea or other bowel affections, and impart to the organism the exact tonic stimulation and recuperative power essential for complete and permanent recovery.

Free from all contraindications of age or season, "Gray's" presents all of the virtues and advantages of cod liver oil, or other tonics—with none of their drawbacks.

THE PURDUE FREDERICK CO.
298 Broadway, New York

to appear before a Congressional Commission on Employers' Liability and Workmen's Compensation.

Dr. Frank H. Blair, of St. Stephen, New Brunswick, who has been ill for some time, has returned from Boston, where he has been taking special treatment.

On account of the ill health of Dr. Brummond, of Chicago, he and Mrs. Brummond are visiting the St. Croix Valley.

Dr. F. W. Snell, of Dennysville, is gradually recovering from his recent illness.

Dr. Frederic H. Gerrish, of Portland, has returned from abroad.

The Civic Club of Portland has been fortunate in engaging Dr. Woods Hutchinson, of New York, to speak at Pythian Hall, December 8th.

Dr. Harvey W. Wiley, of Washington, D. C., Chief of the Bureau of Chemistry, will read a paper before the Portland Economic Club, on "The Economy of Health." The date of the meeting will be December 14th. Any members wishing to attend this meeting can make arrangements with Clement Robinson, Esq., 85 Exchange St., Portland, Secretary of the Club.

Abdominal Support in Pregnancy.

The wisdom of supporting the abdomen during the late stages of pregnancy and occasionally from the very beginning, is becoming more generally recognized. The advantages have been conclusively demonstrated, not alone by assuring greater comfort, but quite as substantially by the prevention of many of the disagreeable and more or less serious complications of pregnancy traceable to abdominal sagging. The large amount of thought that has been given to the proposition is shown by the development of special forms of support. Unquestionably any measure or appliance approaching closest to every day customs and requiring the least possible change in a patient's usual manner of dress, deserves special consideration. To the painstaking medical man, the Storm Binder is bound to present a special appeal. Careful scientific study of the anatomical requirements are reflected in this splendid maternity supporter, and the physician is bound to commend the effective support afforded without forcing a woman to wear an unnatural and unpleasant apparatus.

The Storm Abdominal Binder solves a most important problem, and the benefits obtained from its use show how perfectly adapted it is to the necessarily exacting needs of the pregnant female. The comfort that attends its use is a feature second only to the complete support it constantly gives. Limited space prevents elaboration of the many important and interesting facts connected with the Storm Binder, and every physician who is interested in promoting the welfare of his pregnant patients should turn to page 4 of cover, and send forthwith for full description.

—[*Woman's Medical Journal.*]

SURGICAL SUGGESTIONS.

Both ether and chloroform anesthesia have a hemolytic effect, which is followed by a compensatory polycythemia. It is followed also by 30 per cent. increase in the leucocytes, which begins during anesthesia and lasts for about 24 hours. Leucocytosis is also induced by saline infusions and purgation.

[*American Journal of Surgery.*]

Better than temporary ligature of a large vessel is the application of a soft clamp which can not damage its wall. In the absence of such a clamp an assistant may cause occlusive angulation by making gentle traction upon a ligature passed under the vessel.

[*American Journal of Surgery.*]

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JANUARY, 1912.

NO. 6

Original Articles.

THE DOCTOR HIMSELF AS A BUSINESS MAN.

BY W. IRVING BLANCHARD, M. D., OF PHILLIPS.

(Read before the 59th Annual Session of the Maine Medical Association at
Augusta, June, 1911.)

Mr. President and Fellows :

When I was invited to read a paper before this Association, which comprises so many distinguished men, I could not help feeling more than the usual embarrassment, and I confess that I felt somewhat like the boy who when asked by the Sunday School teacher "Who it was who led the Israelites through the land of Canaan?" replied after some thought, "I didn't, honest, teacher, I just moved here from Boston last week."

I knew I could rely with unbounded confidence upon the generous indulgence of a friendly audience, but that indulgence ought not to be abused. It was still incumbent upon me to choose a topic not unworthy of the occasion, and to weigh well whether my shoulders would bear the burden. Now this last point is my difficulty. Topics are easy to find, but it could not be easy so to treat any one in such a manner as to interest, much less to instruct, a body of men so deeply versed in all the topics which fall within the scope of my poor ability to discuss.

However, I reflected that after all the responsibility of my appearance here would rest upon those inviting me; that what my shoulders could not

bear would weigh very lightly upon them; and that what I might find to say would not fail to elicit from them, and from the fellows of this Association, an outcome of rich experience and original thought, that would more than compensate for my short-coming.

There is an old saying that "Any fool may ask questions, but it takes a wise man to answer them." Now I am going to ask a great many questions. A man travels in order to learn; and learn he will if he carry with him an inquiring mind. When one has nothing to teach, when there is no problem one can expound, the best thing to do is to set forth the problems that exercise his thoughts as clearly as he can; to put his speculations in the interrogative form; by appealing to a never-failing passion in the human breast, the desire to unfold a mystery, to penetrate a secret, to set others at work to help in carrying out the injunction of Bacon, to "question nature."

If what I propound seems to want order, to exhibit evidence of a muddled intellect, I must beg you to remember that it was chiefly composed under the emotions of the wild and discordant winds that abounded last winter in Franklin County.

Gentlemen, I ask that you bear with me for the moment that we may discuss "The Doctor Himself, as a Business Man":

"Oh! watched for, longed for, through the heavy hours
Of pain and weakness, what a gift is thine!
What a proud science, Godlike and benign!
To pour on withering life sweet mercy's showers,
And on the drooping mind's exhausted powers
Like a revivifying sunbeam shine;
For thy next smile what sleepless eyelids pine!
What sinking hearts to which the summer flowers
Can breathe no joy! How many a day
I heard thy footsteps come and die away,
And clung unto that sound as if the earth
With all its tones of melody and mirth,
To me had naught of interest—nothing worth
The brief, bright moments of thy kindly stay."

And yet, gentlemen, notwithstanding the song of the poet, the oratory of the statesman or the eulogies of the divine, we still have our defects, our limitations and our faults. And it is to these that I shall try and call your attention. Do not think by what I may say, that I take upon myself the office of censor, but believe me, I probably need the prescription as much as any of you, and only state the facts that through the giving of them birth, we may all of us be made to look around and see ourselves as others see us!

I conscientiously believe that they will work to the best interests of the Association, and tend to fix it more firmly in the confidence of the profession, and the great mass of the people at large.

It is a trite saying among the people that the "Doctor himself," be he ever so good a physician, ever so skilled an operator, ever so clever a writer, ever so lucid a lecturer, the fact still remains that he is the bright and shining light of ignorance in all matters pertaining to business. And by business I do not mean general matters of a business nature alone, but the plain every day, unadulterated principles of business, that have their being in and are a part of him. His treatment of his fellows in his chosen profession, his procedure before our courts of justice as a medical expert, his handling of the peoples' trusts reposed in him, as to the making of laws governing the practice of medicine and the management of our hospitals, his manner of collecting, and, God help me, paying his bills, and many other little things wherein he is deservedly censured for his lack of business capacity, by those, whom to do business, or even make the attempt, is to do it as it should be done.

"Every individual, on entering the profession, as he becomes thereby entitled to all its privileges and immunities, incurs an obligation to exert his best abilities to maintain its dignity and honor, to exalt its standing, and to extend the bounds of its usefulness." He should, therefore, observe strictly such laws as are instituted for the government of its members, and for this very reason he should *know what they are*.

We have a code of medical ethics which cover all these points, and they were compiled for one purpose, viz: That we should all of us obey them. Our not doing so has held us up to the derision of the business world, who laugh at our "bull in the crockery shop" attempts to keep the machine on the track, while many of the switchmen have never read, or even heard, of the orders for the running of the train.

I should like your valuable judgment as to what particular principle of business we are using in this case?

To frame up a set of laws covering the manner in which medical men should, and are expected to govern themselves in the practice of medicine, both as regards their duties to each other and to the people at large, and then to throw the book containing the same into the bottom of the barrel, to be covered with the accumulations of time, and only dug up and brought to the light on stated occasions, seems ridiculous in the extreme and savoring too much of "boys' play" to be endorsed by a body of men whose calling is so honorable. To my mind the practice of medicine is a profession we should all take pride in, uphold, defend, and if need be, fight for; not one for petty bickerings, unjust accusations or derogatory remarks as regards one another.

It seems to me that a more thorough understanding of the code of medical ethics should be desired by all of us, and that, to that end, a chair should be added to the medical faculty of every medical college in the United States, the duties of the holder of which chair should be to indelibly stamp upon the mind of the student of the future, that in order to become a physician he must first become a man.

As J. Marion Sims once said, "Admirably as our organization has worked so far, I think the time has arrived when we may well consider whether our constitution should not be amended so as to answer new questions and new issues which have occasionally arisen amongst us. Theoretically, our constitution and by-laws seem to be perfect, but when we closely scrutinize their practical operation, we are reluctantly forced to an opposite conclusion. We would like to see them more in accordance with the spirit of the age. We would like to see them liberalized and broadened. During our existence dissatisfaction has now and then cropped out in the form of resolutions proposing slight modifications of organic laws, but they have always been negatived. Besides this, there is a murmur of discontent that does not find distinct utterance; but, like smoke of a smouldering fire, we feel its stifling influence in the atmosphere that surrounds us."

Let not my devotion to the interests of this Association be measured by my meagre contributions to the archives. There is not one amongst you that feels more anxious for its permanence and prosperity than I do, and I would be as far from doing aught to disturb its harmony, or to injure its influence, as any of you. It is easy enough for a ruthless power to demolish a beautiful edifice, but how rarely is the same power capable of rebuilding it! I do not propose to mutilate our beautiful structure. I would do nothing to weaken its foundation; I would not change its plans; I would not mar its beauty or limit its usefulness, but I have some alterations to suggest, which suggestions will, I hope, be received in the same kindly spirit in which I venture to make them. The chief objection that I have heard made to our splendid edifice is that its principal entrance is not in proportion to its grandeur. That it is too narrow and too low; so low that strangers entering are obliged to bow down, often coming almost to their knees before they can get in, and that the door does not swing open widely enough to admit freely the numbers that would like to enter. Now, I venture to inquire if this be true, and then if it be possible to enlarge its entrance without injuring the solidity and style of its architecture? And while we are investigating its doorway, it would be as well to take a look inside and see if there are any other little alterations needed for the comfort or convenience of its occupants.

But, dropping metaphor, I now proceed to an analysis of our organic laws, and will make such suggestions as seem to me needful under the cir-

cumstances. We have a law that provides that a man or woman wishing to practice medicine for a livelihood in the confines of the State of Maine must first of all appear before certain gentlemen appointed by the state and pass a satisfactory examination in medicine, surgery and moral character.

Gentlemen, what a dismal failure this relic of barbarism proves to be when brought face to face with business principles? Was it not conceived in ignorance of the injustice it would do to others less fortunate than we, who by its very passing, were made whole! Has it not been succored long enough by a body of gentlemen who otherwise are honest, courteous, and believers in fair dealing! And ought we not at this time, call a halt upon the further use of this plaything which should belong to the time of the inquisition rather than to the twentieth century. You say other states have the same law and why not we? Yes, but remembering our state motto, why should we await their awakening?

If we were a society of young sophomores, expecting to recruit our ranks from unknown men, we might ask them to give us a specimen of their penmanship, composition and rhetoric, but when we tell a man who is known to us, after he has spent ten years of the better part of his life in the preparation of himself for the practice of medicine and graduated with honor to himself, to his class and to his university, I say when we say to such a man, you must pass an examination once more before you can enter our Holy of Holies, the thing is not only absurd, but it is an insult to professional manhood, not to be tolerated or excused.

Again, men who have made reputations, and who feel themselves to be the peers of the ablest amongst us, dislike to submit to the indignity of being passed upon by a star chamber council. Now, what I would like to ask is, is this business, do you think? Would it not be more nearly following business principles if we placed the burden of proof as to the qualifications of this man where they belong, and stopped insulting him as he enters our temple? How would it work to raise the standard of the medical college so that when you meet a graduate you would know all about his qualifications without the examination?

A man passes four years in a medical college in these days. Do you gentlemen wish to tell me that any three of us can find out by asking ten or twenty questions of this man, that which his college could not find out in four years? It is to be presumed that they have found it out, else why did they give him his diploma? If the colleges can not be relied upon in these matters, why not close them up as a menace to the public? If they *can* be relied upon, and I have faith in the most of them, why is it business for us to doubt their records, and insult both the man and his Alma Mater by insisting, like the child, that he "Do it again?"

There is no question, gentlemen, but what every man before he is allowed to practice medicine should show his credentials. But this man has his credentials, why ask for more? In the case of a man coming before us who has no credentials, then, of course, it is right, just and proper for him to pass an examination. It is no insult in this case for him to pass an examination. It is no insult in this case but rather an honor, because if he succeed, he then has his credentials, and we are asking nothing more of him than every one of us have had to pass through. And still, in this case, I am sure that we can do better work, and bring about better results than we are doing at the present time.

A written examination, comprising the answering correctly of from ten to fifty questions does not to my mind signify anything. Young students fresh from their books might under those circumstances be able to hand in voluminous papers with answers that correspond to the wording of their text-books, and still be unable to determine by practical test on a living patient whether the patient was suffering with heart disease, or a corn on the tissues of the brain. On the other hand, a practitioner of medicine of thirty years' standing and with a record of good work, well done during all that time, might find that it was a hopeless task to turn back the pages of time and be born again.

Just imagine asking a man to tell us the dose of morphine sulphate for instance! If he says he does not know he is condemned by the board, and yet he tells the truth. Not a single man within the reach of my voice can answer it honestly any other way until he knows his patient. Or what would you do in such and such a case of surgery, obstetrics, gynecology, or any of the other 'ologies? Speak right up. What would *you* do? We know that we do not know until we meet our patient, unless we are imbeciles and follow one rule, regardless of results. Why then, gentlemen, do we put it up to the applicant to answer when there is not one among us who can do so?

Let us be honest and do business as it should be done. If we are to examine an applicant, to my mind there is only one fair way to do it, and that is by means of the living patient. There are in this state plenty of hospitals, to which the applicant could be taken by our examining board, and brought face to face with the living patient in any or all of the departments of medicine and surgery. Let him make a diagnosis, a prognosis, and give his treatment, and then and not until then, will you be able to render a just decision as to his capabilities.

EXPERT TESTIMONY.

To me, Mr. President, this is a black spot that will not rub off. Expert testimony. God save the name. Supposed to mean the giving of medical

and surgical testimony relative to a given case, by a man or men of the medical profession who are believed to be competent to advise the court as to the actual medical or surgical facts in the case at issue, and who stand before the community at large as men of integrity, honesty and loyalty to the people in common, their country at large and the court before whom they are to testify in particular. And yet, Mr. President and fellows, we are met with the sad fact that at this very moment medical expert testimony as it stands to-day before the people of our country, stands for nothing. Is this good business? Who is to blame for this state of affairs? We doctors ourselves and no one else. Instead of keeping strictly to our text, that of an advisor of the court, as we most certainly should, we become, through a desire to be a head-liner in the public eye, a party to the fact and placed in that light by the opposition, as we should be. We proceed (in order to bolster up our case) to testify to that which was so, that which was not so, and that which was or could not be so. Anything to gain our end (and receive the money.) What a retribution? The sign, "not wanted," has been hung out.

If we had followed business principles we would to-day have that which we have not—the confidence of the people as experts. How would it work if this great Association should pick out and stand for the integrity, honesty and loyalty of a class of men who have by their work proven to us that they are worthy of our trust and confidence and say to the people at large, "These men will in any given case tell you through your courts of justice the truth, the whole truth, and nothing but the truth. We stand back of any testimony that they can give because they are men of not only professional standing such as to warrant us in presenting them for your favorable notice from a medical or surgical standpoint, but they are also men of integrity, and can be trusted by you." The honor of being selected by his fellows for such a high position, would be enough to keep those chosen ever alert to the cause of honor and right and justice. Then and not until that time, in my judgment, can a medical expert hope to be taken seriously by the people. Is it a good business proposition to do this or not?

MALPRACTICE.

I think I state the facts, and therefore have no fear of contradiction, when I say that 90 per cent. of all malpractice cases are the result of some little doctor's meddling. These cases occupy a great amount of time before our courts that could be used to better advantage by them, and they also hold up the medical profession at large many times to ridicule when it is not deserved. How would it work as a business principle for this Association to elect a body of men before whom all such cases should be brought and

threshed out, previous to their being aired in the courts? We would thus have a jury who could understand the case perfectly and who would render a decision that would be just to all parties concerned. I believe that could we have such a law, and then enforce the same, that the little doctor would be less given to stir up the fires of discord, well knowing that unless he could prove his case, he was certain of censure from this Association.

COLLECTING BILLS AND PAYING THE SAME.

“When a doctor saves a life, we appreciate his skill!
But appreciations vanish when he presents his bill.
Though bills of other business men are paid without delay,
When once a year the doctor comes, we tell him ‘not to-day.’
We have the money with us and can pay as well as not,
But the bill goes in our pocket. where it is soon forgot.
Why is it we expect so much from men so free to give,
Forgetting they are mortal, and like us must eat and live?”

The poet has asked the question, let me try to give you the honest answer. Dr. X does not collect his bills because Dr. Z does not. Dr. Z can't pay his bills because Dr. X can't pay his. The fact is that because of the lax way of doing business one doctor compels the other doctors in his community to wait upon the good-heartedness of the general public for their honest recompense for services rendered. Because Dr. X wishes to stand before the public as a man who is a friend of the people and never wishes to destroy their peace of mind by such a harsh reminder of justice claiming its reward as sending a bill, Dr. Z and the other poor devils in that immediate vicinity are placed in the position of an extortioner and persecutors of the good people because they ask that merit, time, drugs, dressings, sleep, and many times health itself, be given some consideration. Dr. X has a right to be a good fellow and he has a right to be charitable, but he does not have the right morally, and he should not have the right professionally, to make others pay his charity bills. Through the Dr. X's of our profession, the public are led and have always been led to believe that the doctor's bills can be paid any old time, and hence it is left for the last. Is this business? Who is to blame for it? No one but the doctor himself.

There is no bill that should be so gladly paid as that of the doctor, through whom the patient has regained health or been relieved of suffering, and in my candid judgment there is no bill that could be collected so easily if the doctors would but use business principles. Because a doctor's bill is the last one paid is no good reason that it should be so. Just why a doctor will allow himself to be harrassed by bills that he owes, losing sleep thereby,

dodging creditors like an escaped convict, ever ready with excuses for not meeting his obligations and living a perfect hell upon earth because of the same, when on his books (if he keeps them so that a Philadelphia lawyer could decipher them) are the accounts of many of his best townsmen, the sum total being far in excess of that which he owes, is beyond my limited powers of conception, but such are the facts, nevertheless.

TREATMENT.

How would it work for us as an Association to vote that every single one of us should be obliged by this Association to send out a statement to every patient once every thirty days, (the same as is done in all other business); that we shall be each compelled by this Association to send a bill every ninety days, (the same as most other businesses), and that a satisfactory settlement of some kind must be made with each of our patients the first day of every year. Failure to do any of these things having been reported by some fellow of this Association and proven, should upon a vote being had, erase the name of the offender from our list of membership, he too at all times being placed back in his lost position upon fulfilling the requirements of this Association. This would have the sanction of the people, I am quite sure, and bring us where we have always had a right to be, among the solid men of our respective communities, instead of as now, among the bread line.

Think it over. You may not like it at first, but like new wine, the longer you keep it the better it is, because it is business.

It seems to me, then, that it is high time that this great body of high-minded, honest and courteous gentlemen, whose life work is "helping others to help themselves," should begin to see the "hand writing on the wall" and help each other and themselves by doing business as it should be done.

Gentlemen: I would not have you think that I have no admiration for our profession because I have made mention of some of the causes which in my opinion impair it in the public confidence. I still believe it noble in all its efforts to alleviate human suffering, and while it may have its dark spots, like the great luminary of the universe, yet, like the sun, it warms and vivifies nature into bloom, health and beauty.

Mr. President and fellows, I thank you for your attention.

. . . DISCUSSION. . .

Dr. E. H. BENNET, of Lubec: Gentlemen, in opening the discussion on Dr. BLANCHARD'S very practical paper, I will take the opportunity to say that I consider it your duty to discuss every paper read before this Association. It means

considerable in time and energy, for a member to prepare a paper, and after he has done so, he has a right to expect of you courteous treatment, which simply means that his paper be as fully discussed as time will permit. If you do not agree, disagree; but stand up and say so, without wasting time in waiting for each other.

"The Physician as a Business Man," is an exceedingly important matter, as it applies to every one of us. Generally speaking, the better business man the Doctor is, the better physician he will make, for without the funds which correct business principles will secure for him, he will not be able to continue his studies, and this in turn will handicap and prevent his progress. "Success in business is seldom owing to uncommon talents or original power, which is untractable and self-willed, but to the greatest degree of common place capacity."

Every act of ours intended to retard, hinder or embarrass a colleague, will surely fall with double force upon our own heads. TAYLOR once said: "An unjust acquisition is like a barbed arrow, which must be drawn backward with horrible anguish, or else will be your destruction." In this connection, co-operation is the watchword.

I can hardly agree with the essayist in the opinion that we would be as well without a "Registration Board." I think it has helped materially in the past, and I believe it will eventually result in a National Registration Board, a certificate from which will authorize the holder to practice anywhere in the nation. To my mind this should be our aim; but the child must creep before it can walk, and the medical profession is but a child to-day compared with what it will be a century hence. I heartily endorse making the examination practical; give the applicant a patient, rather than a pen.

I agree fully with the idea of giving more attention to ethics in medical schools. In fact, I am not sure but we might begin the teaching much earlier, and introduce it into the public schools, for the essence of it is but gentlemanly conduct toward each other, and who of us do not wish to be considered gentlemen.

In place of making our constitution and by-laws conform to the spirit of the age, which seems to be extremely selfish, I would reverse it and make, or try to make the spirit of the age conform to our present constitution and by-laws. The standard of medical education is certainly on the up grade; give it a helping hand.

I fully endorse Dr. BLANCHARD's ideas concerning expert testimony, malpractice suits, and collections.

Dr. HOLT said: The title of Dr. BLANCHARD's paper led me to think it would be confined to the financial part of a physician's life, and I had prepared a discussion upon that assumption. He has, however, made it broad enough to include other relations of the physician, which are well worthy of our attention and consideration. The physician's life must be to a certain extent altruistic, but there is a limit to philanthropic work,—especially to those patients who are able to pay for his professional services.

I remember of coming to this city over thirty years ago to see patients with one of the most celebrated physicians that ever practiced in this state—Dr. H. H. HILL—and I would hear this conversation in his office: "Doctor, I came to pay my bill." Dr. HILL, "When were you sick and how long?" The patient, "Last year, about two months." Dr. HILL, "How many times do you think I came to see you?" The patient, "Somewhere from fifteen to twenty times." Dr. HILL, (not looking at any book) "You may give me thirty dollars and I will call it square."

Think of the number of patients who never come to pay their bills when they know the doctor does not keep a ledger account of their indebtedness! We owe

it to ourselves, to our families and the community in which we live, especially to the members of the medical profession, to have a system of keeping records of cases which will include an itemized account of the patient and what is done for that patient in a readily accessible form for present and future reference,—together with charges for professional services. From this record a bill should be made out and presented to the patient and looked after until it is paid.

This is business, and business properly conducted tends to efficiency of all concerned. In order to conduct business properly there must be a method and certain books used to record the transactions. The necessity and details of this work were impressed upon me in a four years' career as clerk and bookkeeper in retail and wholesale stores. Naturally when I began the practice of medicine, I continued the same method and devised books to meet the requirements, the first of the kind in this country. For myself I prefer bound books with folded stubs, so the record can be expanded by pasting in data at any time. I tried the card index, using envelopes to keep additional data, for one year, but returned to the bound book with stubs for several important reasons. Whatever the method a physician may have for making records and keeping his accounts, he should make them as accurate as possible, for thereby he will know more about his patients and advance his knowledge in medicine, and finally, if he makes his bills out at stated intervals and insists upon their being paid, he will be better off at the end of his professional life.

Dr. BLANCHARD did not allude to the unbusiness method of physicians of originating or promoting hospitals into which so many of their patients go and expect to be treated by him or some other physician free of charge. It is all right and proper to treat those who are worthy of charity, free of charge, but because a physician is willing to do this charity, there is no reason why he should treat a whole lot of other patients who are able to pay for his professional services. Some people regard getting free treatment at a hospital in the same light they do in getting a free ride on a railroad. If we analyze this practice of free treatment at a hospital, of those who are able to pay, we find it is not only a wrong perpetrated upon the physician, but an injustice to those who gave of their time and money to establish the hospital for the poor and unfortunate ones who are worthy of free treatment. It is not only a wrong and an unbusiness method practiced upon the physician and the hospital, but it is equally as bad for the person who gets something for nothing when he is able to pay for it.

I agree with Dr. BLANCHARD in regard to medical registration. The practice of requiring an examination before giving a certificate to practice medicine fitted in conditions that existed when the laws were enacted, but which no longer obtains. It should be discontinued, because the examinations are not, as a rule, conducted with a view to find out whether the applicant for a certificate to practice medicine, has a trained mind and knows enough of medicine to begin its practice. The present registration law of this state has fairly met the expectations of its promoters, but I shall hope to see uniformity and reciprocity among all of the states.

Dr. J. D. AMES, of Norridgewock: Mr. President and gentlemen, there is one thing I would like to take exception to on this question of hospitals. There are some things that, while they may not be good business, are mighty convenient. I have understood that Massachusetts has only one hospital which they endow. It might be best that we have only one hospital endowed in the state, from the strictly business standpoint, to handle all business. But it is not convenient, situated as I

am in a little town, always to take a patient to a central point. We have small hospitals very near, one at Skowhegan, one at Augusta, one at Lewiston, one a little further, at Portland. I have taken patients to practically all of them. Now there are occasions where it is practically impossible to take a patient a hundred miles to be operated on. It is practically impossible in our town, for the patient to put in a hundred dollars to go a distance. A little hospital is a great convenience, and I believe that the little hospitals are doing a great work, and I believe that they are practical. You apply the same principle as I believe the Greeks did under LYCURGUS; they furnished a central place to furnish board. As a business proposition it paid. They could be boarded cheaper at a central eating house than anywhere else. But it was not convenient.

Dr. H. W. MILLER, of Augusta: I wish to say just a word in connection with that part of the Doctor's paper, referring to the expert testimony. I think he makes a very practical suggestion, and as I represent one of the types of experts probably most maligned of any kind of medical experts, I feel that I ought to say something. The law of this state in regard to expert testimony in connection with insanity, is a practical application of the Doctor's suggestion, viz: When a person is held for crime, and the plea of insanity is presented, the patient is compelled to go to one of the state insane hospitals for observation, where there are physicians who are supposed to be competent to express an opinion on insanity. These physicians may not be appointed by the Medical Association in the manner suggested by the reader, but we have in reality a practical application of the principles suggested. I want to speak in commendation of this observation law in the State of Maine. It has been referred to quite frequently in the American Medico-Psychological Association as an almost model law, and I have quite frequent communications from physicians in other states inquiring as to the practical workings of this law.

Dr. W. I. BLANCHARD, (closing discussion): Mr. President and members, I hardly think I can add anything more. The only thing that occurs to my mind is in regard to the examination. Now a number of our medical schools are compelling the students to get an academic education before entering the medical school. Now it seems to me there is the essence of the whole thing. Compel every school, every college, to do that, and you have got the thing in a nut shell. A man who puts four years in an academic college, four years more in a medical school, and as many more years as he wishes, in a hospital, I think every one of us would say, is capable to practice medicine, and to do that without coming before any one. It is a self-evident fact that the mere holding of a diploma from any such school as that, is enough to show to each and every one of us that the man is all right.

Now, again, how does this thing work? It happens to be my good fortune, or bad, as it may please, to have passed a number of these examining boards, my business being such at one time that it led me from one state to another through the Union, and I can say honestly and conscientiously to you that not in one single instance was there any justice or was there anything excepting hypocrisy. Let me tell you of one. I was called in a western state and went up before the board. The first question they asked me was my name, of course. "Where did you graduate?" I told them. "Where were you born?" When I told them that, the chairman of the board looked up. Says he, "Is that so? I was born seven miles from you," and wanted to know if Charley Stark was still living. I told him he was. He asked for Allan Smith, and so he went on. Right in the middle of the talk he

looked at the clerk and said, "Make out the papers." When we got through, I had the papers, paid for it of course, but that man did not know any more of my capabilities as a doctor, than he did before I went into the office, neither did the board, nor they do not to-day.

Another instance, and I will close. I went into a place—I was not to take an examination, but calling on a brother professionally, whom I knew very well. He was one of the members of the examining board of the state. Picking up some papers, I said, "Doctor, what are these?" "Papers of applicants." I read them over. I will be frank to say that I could not have answered them, and I do not think any one else could. I asked him if he thought he could answer them himself. He said no. "I will tell you how this thing works," he said. "You see we went to work and we put out a set of questions that we knew no living doctor could answer, and then we got them. If any fellow comes up we know is all right, a good fellow, we say 'That is all right.' But if there is anybody we do not want, we know before he starts that his name is out." That is just where it is. Now is that just? Is it common-sense? Is it business?

THE DYNAMIC ENERGY OF A MAN.

BY J. D. AMES, M. D., OF NORRIDGEWOCK.

(Read at the 59th Annual Session of the Association, June, 1911.)

It is not the purpose of this paper to attempt to enlighten the members of the Association upon the subject, but rather to bring to mind certain well known facts and with them some of my own fancies, and so hope to provoke a discussion that will result in some general enlightenment.

To all men of whatever class the greatest thing in this world is power. Take the word as you will, but I will use it simply in the sense of dynamic energy, not considering nor yet forgetting that important power is variously known as the psychic or spiritual. Who has not stood by the bedside of some patient just past the top limit of some severe fever and helplessly watched life slip away from him, and thought if he could only lend him just a little energy, even what he could spare easily and not miss. Patients from whom the disease is apparently gone, the toxins most eliminated, tissue and cell structurally intact, yet something vital most gone. What is that something? Can it exist in anything other than animal tissue? Could it be made and infused into the living animal tissue in such a way that the animal could use it again?

In such a crisis, it often happens that stimulants accomplish nothing. Indeed, they may be dangerous, for they actually give no power at any time, and at best only regulate and may even waste what power there actually is if used indiscriminately. Plainly what is wanted is power. That

something you feel when the motorman turns on the switch to a trolley car, or when you open the throttle to your automobile; something that will not only make the heart muscle fibre contract with more energy, but will furnish that energy; something that will hold the tension in the arterioles and so distribute the blood; something that will make each individual cell keep up its activity and make repairs.

In the mechanical world the standard powers are, as you know, water, steam and electricity. Water power is but the use of a weight that has been raised, while both steam and electricity in part resemble animal power in its manner of production, affinity between the particle of carbon and the corresponding atoms of oxygen causes motion in the form of heat that drives apart the molecules of water, confinement of the boiler causes the pressure transmitted by the steam to the piston the rest of the acts all visibly mechanical.

Now in the animal: take an amœba, one of the lowest form of cell life, it simply envelops its food, absorbs, assimilates, expels its wastes, propagates itself by division. Its power seems to be simply magnetism with its tendency to polarity. This does not explain its power to select food, which may be a sort of intelligence, though more probably is due to a more universal law, such as makes a steel magnet attract iron but not copper.

In an animal we have a group of such cells connected up by a wiring of nerve tissue, forming a body, and supplied with suitable food by a system of tubes and blood vessels. Each tissue cell, in its act of taking food and rejecting waste, generates heat, also a form of motion belonging somewhere in the class with electricity. All power, whether stored or applied, is a form of motion. Visible motion, sound, heat, light, electricity, is the way the scale runs up, and they differ only in the wave lengths and rapidity. It is said that they all increase in octaves, just as sound does. Also just as our ear recognizes only a few octaves of range in sound, and our touch a few degrees in heat, just so we are only able to recognize a few grades in the electric scale. For instance, we all know the heat and power kind, the faradic and galvanic, the X ray and N-ray and a few others, but there are probably very many more kinds, and one of these may be the animal kind.

In the animal body the affinity between the tissue cell and its food and oxygen creates a force feeble in the case of each cell, but augmented by wiring together many groups and finally collecting and storing it at some central point, just as electricity is held in a storage cell.

In the higher grade animal, the vertebrate, the spinal cord, is a great double cable of many wires, power wires going out from the great central station and the brain forming the anterior portion of the cord and distributed to the fibre of the muscles.

Mechanically speaking, every muscle in the body is a motor, having no power of its own, but when the power is turned on by the switch in the brain centers it acts, and acts only so long as the current is applied.

The combined heat made by all the cells in a man's body is often great enough to destroy life in a few hours, if it were all retained, but thanks to the vaso-motor system and the porous structure of the skin, which Kellogg says in an average man with an area of nineteen and one-half feet, exposes eleven thousand feet to the air when wide open, or any part of it as needed, it is usually disposed of.

Accumulation of this other form of motion gives a sense of well being, a desire for muscular and mental activity, and unlike heat it does not usually have to be wasted, as the demands of every day are greater than the supply. Like electricity or steam, animal power has two quantities, volume and tension. In electricity we say volts and amperes; in the case of steam we say horse power, and horse power depends upon the oxidizing powers of the furnace grates as well as the boiler and engine capacity. A five-horse power boiler with a hundred pounds pressure will start a twenty-horse engine as well as a twenty-horse boiler with a hundred pounds pressure, but it will not hold up the pressure—it will soon fail up. So with two men; each may be able to lift exactly five hundred pounds. One may do it once or twice before he is exhausted, while the other may do it twice as many times. The one has as strong a muscle as the other, perhaps, but his capacity to generate power or perhaps to store it is only half as great. If you could imagine a gauge like a battery gauge applied to the nerve center or to the poles of the storage system, if there are any, and this gauge should register tension and volume, to one of these men it would register tension, say a hundred volume a hundred, while to the other it ought to register tension a hundred volume fifty.

Such a gauge, if it would respond to this power and nothing else, would be an extremely valuable thing. It would determine a man's capacity for work, his chances to survive in sickness. It would also explain what often seems so inexplicable, why a frail feeble person will often endure so much more than some other robust person. It is not the great volume but the ability to maintain the necessary tension to the animal power that enables the organic life to go safely on. Just as the knowledge of the temperament to keep within nature's limit is what counts.

Various devices are on the market for testing a man's power, all with more or less merit, but none with the positive simplicity in its method of the meters in an electric power house. One dial says there is a tension of twenty-three hundred volts; another an output of so many thousand amperes. You have no need to even see the machine.

If, now, either indicator begins to fall, you know at once that either some

one is using too much for your machine capacity or else something is wrong with the machine itself. Suppose you were to go into the engine room and inspect the engine. You would find the automatic oiler out of order, the boiler "scaly," the tubes full of soot, the draft clogged, the fuel bad quality. What would you advise? Would you say you must burn petroleum to stimulate the fire; you must put on a forced draft to keep up oxidation; you must oil by hand? No, you would advise kicking out the fireman or educating him and cleaning up. Yet if a man gets into such a condition he is patched up in much this same way. Since it is pretty certain that ordinary micro-organisms cannot successfully enter a perfectly healthy man, it is probable that a fall either in the tension or volume of this power precedes their invasion. With the fall in tension you have relaxation of tissue, slowed up capillary circulation, lessened gland action, and a gland product to most of the gland that is no longer strongly antiseptic. If, now, this fall is due to a temporary cause which is removed immediately, the tissue cells destroy the microbe, whether by phagocytosis of the white blood corpuscles or otherwise, but if the cause is long continued the microbes become established, and by their growth and production of toxin all activity is hindered, and the vital forces keep going down.

These falls in the volume or tension of the vital forces are practically always due to something the man is doing, and call for an education and cleaning up of flues and grates, and a better selection of fuel, and rarely for drugging alone, but if the condition has gone on until there is a destruction of tissues, then there may be no end to complication, as a demand for makeshift patching.

. . . DISCUSSION. . .

Dr. HOLT said: In the abstract given of Dr. AMES' paper, the "Dynamic Energy of Man," an important quality of man is taken into consideration. It asserts that "power is used" and "plays an important part in the repelling of the invasion of microbes," and that there is "need of a method of testing this energy in the same manner that steam and electric power is tested."

The "power" that is referred to in the first two sentences of the abstract is the resisting "power" of the system that sustains the functions in their normal action against injury or disease. This "power" can only be tested or measured by its actual manifestation in the persons resisting power when injured, or subjected and exposed to various diseases. If a person exposes himself to diphtheria, again and again, and does not have the disease, we say he is immune to that disease; that there is something in his system that resists the invasion of the germs of this disease, and thus it has been demonstrated that that person has this "power" of resistance. I can conceive of no other way of testing this "power" of a person than by actual practice. It certainly can never be tested in the same manner as steam and electric power, for each of these powers is the product of indispensable elements used as factors, whereas the "energy" or "power" referred to is an element of the

functional ability of a person, and the value of one element of anything can only be tested or measured by what it does, or what can be done with it. If we consider the "Dynamic Energy of Man," to include the whole we find by analysis three indispensable elements, namely: the functional ability, the technical ability, and the competing ability of a person. The product of the first two elements used as factors gives the efficiency of his energy. These elements used as factors should be employed in rating a pupil at school. When all three elements are used as factors they give the earning ability. In this latter sense the entire dynamic energy of man is included, and this may be tested or measured in the same manner as steam and electric power. Take for instance electric power. There had to be some practical way of measuring it for commercial purposes. For this purpose eminent men in this line of research came together in Europe and determined that the unit of electromotive force should be called a volt in honor of Volta, an Italian physicist, which should be in quantity a current of electricity of one ampere, named in honor of Ampere, a French physicist, and which current of electricity should have a resistance of one ohm, named in honor of Ohm, a German physicist. These indispensable elements of electricity were each given a definite value and used as factors to be multiplied together to produce a watt, named in honor of Watt, the greatest English inventor. 746 of these watts make a horse power. Thus we see by this analysis and method that three celebrated Continental physicists represent three indispensable elements of electricity, and that they are used as factors and multiplied together to produce a composite quantity, named in honor of the greatest English inventor, and that America, the home of the greatest inventors in electricity, is not in it.

The natural science method of determining the value of anything requires that there must be two or more indispensable elements used as factors in order to obtain a value which will correspond with all the conditions of that substance. The dynamic energy of man in the sense of his resisting power to injury or disease is an important quality of his functional ability, and as such can only be tested or measured by its manifestations in the life of that man.

Dr. FLORENCE MERROW said: There is no subject before the medical profession more baffling and intricate than the one in hand. It is as old as the world and has puzzled sages and philosophers alike. It has been said "that all men are born equal"; but those who study the subject to-day have arrived at the conclusion that no two individuals have exactly the same constitution. Therefore, men are not born equal in any sense we may try to apply the old saying.

To illustrate, we will consider the picture called the tree of life by chemists. This tree has for its trunk the simple elements C. H. O. But what a wealth of products come forth from it! Some are worthless as far as we know; some are invaluable, having formed all of the modern drugs of the methyl-ethyl type. So we find people made up of much the same composition, Jim has one constitution and John has another as a result. Had we instruments for the measurement of such elements we would be able to come very close to the measurement of dynamic energy from the physical standpoint.

We have to-day, as of yore, two schools of science. The one is dealing wholly with laboratory methods; the other with psychic forces, which is quite as important. Of the latter school Boris Sidis, Münsterburg and the late William James are representative men. James' last lectures are classed as pragmatic in style; and whether a germ or religion is under discussion, the cause and effect of the same upon man is fearlessly and openly discussed. Weisman designates the protoplasm of the germ cell as holding 211 latent dynamic force of physical life.

Again psychic forces must be considered. We have to ask: Why grief undoes our best efforts in medicine? Why worry prevents recovery? when we know there is no organic disease present with our patient.

Discussing measurement of vital force, we have attained thus far: We have instruments which tell us the force of the heart beat; the contents of the blood as well as that of the stomach, liver and intestines. We also have the pneumograph which records the changes in the air passages; the spirometer for the volume of air in the lungs; the aerometer for the amount of gas in the blood.

Again, our knowledge of diffusion and dialysis is increasing. The opsonic index is a great aid in preventive treatment. In fact, in many instances we can tell how long a man may expect to live, and about what he will do with his career. Yet we have have but just begun to learn. "When all mankind alike is perfected—then, not till then, I say, begins man's general infancy.

William Howell suggests with Weisman that metabolism is self perpetuating, which under certain conditions, makes us immortal, and says: "Barring accidents, disease, etc., it is capable of reproducing itself indefinitely. Senescence and death is a secondary property acquired as a result of variation."

Therefore, in summing up the knowledge we have pertaining to the measurement of dynamic energy, I would say: We have begun to know something about the subject. That our knowledge of digestion and absorption, together with the nervous system, as well as the brain with its wonderful motor and sensory areas, combine to give us an outlook, at least, of the great power behind the throne, known as dynamic force.

Dr. J. D. AMES, (closing discussion): I have not much to say, only this—that my idea was—I may have a muscle, for instance, the biceps—some power has to be applied to lift a weight. We know that this muscle is attached by tendons at the two ends, that when we turn our will power on whatever we do we shorten that muscle. Now that is actually applied, a power—when we lift say ten pounds we have to apply that in some way to that muscle. That muscle is made up of thousands of fibres. These fibres under a microscope are shown to be composed of cells lying end to end. Now let us suppose that we look at one fibre which is made up of cells—let us liken it to a string of beads. What takes place in that fibre when the will says "contract." Somewhere in your body you turn a current, a purpose, an influence on to that muscle fibre. It is like a string of beads—suddenly those bead-like bodies flatten,—as soon as you turn off that current it goes back. So long as that current is on there it shortens. Take a coil of wire as you see it in the common sparking outfit of an automobile, for instance, or a boat, fine wire insulated; take another coil inside of it. Turn a battery current through the inside wire, and you have the tremendously high tensioned spark come from your outside wire. You get certain results whenever that is on. Now you can imagine that that fibre, being bead-like in its structure, is encircled by a nerve. A nerve is essentially a wire, it is insulated—it is not metallic but it is a wire just the same. Some kind of a power is turned on from a central current and encircles that fibre, and that fibre under the influence of that current contracts, and if there are a thousand fibres you have the multiplied power of a thousand fibres contracting. I will say no more, but I am much interested to know what that power is, whether it is altogether in the nerve centers and is turned by those wires on to these muscles, or is part of that power generated from the cells in the tissue itself? I don't know. But I do know that to lift ten pounds, you have got to have a certain amount of what, for the lack of something else, I will call Dynamic Energy.

NUTRITION AND METABOLISM.

By H. AUGUSTUS MILLIKEN, M. D., OF HALLOWELL.

Protoplasm, the basis of all physical life, owes its existence to nutrition and metabolism, and we may broadly assert that the function of nutrition and metabolism is to chemically build up and tear down the living protoplasmic cells of the different systems of the body. Just what the difference between the living cells of the different organic systems of the body are, is at the present time unknown, but we do know that in the development of the human embryo certain protoplasmic cells become nerve, others muscle, still others glandular and excretory; that these cells when taken together form an organ, and finally several organs together forming a system, such as the respiratory, cardiac, nervous and excretory systems of the body.

With our present knowledge of metabolism we are unable to study the metabolic changes of the individual organs, but we are able to study the metabolism and nutrition of the body, as a whole, in a very satisfactory manner.

Referring to the study of the food products that Nature has placed upon the earth for the subsistence of mankind, we find an enormous variety of names applied to the same, and if we did not give it careful investigation we might wonder why our digestive apparatus could adapt itself to such intricate work in order that assimilation might be possible. But on further examination we find that we can classify all these foods into three classes--fats, proteids, and carbohydrates. These three classes of food, taken together and in proper proportion, are normally what is intended for the maintenance of the nutrition of the body. However, we find that it is possible for one of these classes taken alone, to replace the other two. But in order to do this the quantity has to be greatly increased, thus taxing the digestion and often doing harm. It can be readily understood that there must be a definite relation between amount of heat and energy needed for the maintenance of the body, and that which is taken in. This ratio between the intake and the output of chemical combustion is called the caloric needs of the body. The unit calorie is estimated by the amount of heat and energy required to raise one kilogram of water one degree centigrade. When different kinds of food stuffs are burned in the body, different units of heat are liberated. Thus, each gram of fat produces nine and three-tenths calories; each gram of proteid, four and one-tenth calorie; and each gram of carbohydrate, four and one-tenth calorie. It will readily be seen from these figures that fat produces relatively much more heat and energy than either carbohydrate or proteids, requiring a gram of proteid and a gram of carbohydrate to be the equivalent of one gram of fat in caloric value. This fact is essential to remember should we ever wish for any reason to

remove fat from the diet and still maintain the nutritive equilibrium. In order to do this, it would be necessary to increase two grams of either carbohydrate or proteid for every gram of fat decreased.

The amount of energy that must be supplied to the body depends primarily upon the activity of the tissues, and is subject to such influences, such as heat and cold. But taking the average individual adult, in health, these figures are approximately correct. As to the number of calories needed per kilogram of the weight of the body, resting in bed, 30 to 34 calories; quiet, out of bed, 34 to 40 calories; moderate work, 40 to 55 calories; hard work 45 to 60.

A small person has relatively a larger amount of surface than a large person, and therefore relatively needs more food. This explains why children need more food proportionately than an adult. Fat people need also less food, because the thick layer of fat beneath the skin prevents heat radiation, and the fat itself is practically dead tissue in the body, and doesn't consume energy.

PROTEIDS.

Proteids is that class of foods that furnish energy to the body and repair waste tissues. They will not produce fat in the body even when given in excess. Therefore, the fat that is obtained in the body from proteid sources is not worthy of consideration.

It was formerly held that these proteids did not undergo any great change in becoming assimilated, but recent investigations go to show that they undergo extensive cleavage, and are assimilated through the plasma of the blood into protoplasm. We know these proteids under the common names of milk, fish, eggs and fowl. These articles of food should be used freely by those persons who work hard, and use up an abundance of energy. They should also be taken in some excess of the tissue needs in order to regulate the caloric needs of the body. They should not of themselves form a diet, but should be aided by a proper proportion of fats and carbohydrates.

CARBOHYDRATES.

Carbohydrates are organic compounds of carbon, hydrogen and oxygen in the proportion to form water. This class of foods consists of the sugars and starches, both raw and cooked. They are assimilated into protoplasms as glucoses and dextroses, or stored in the liver as glycogen. They are capable of producing heat and energy, and storing up tissue as fat. Their caloric relation to fat is the same as proteids, or two to one. Nearly all of this group of foods are derived from the vegetable kingdom.

As to the normal diet of a healthy individual, it is well to consider

what is required of his tissues' task. The most concentrated diet can be obtained by combining in proper proportions fats, proteids and carbohydrates. When combined this way, less wear and tear is required of the digestive organs and the result is the production of greater energy. In modern years we have foolish fads of Fletcherism, vegetarianism and carnivorism. These fads are all really dangerous, because they contain a certain element of truth. There is no difference between the combustion which produces energy in the body, than without. Our fuel should depend on what is required of us to do.

A highly concentrated diet with its power of increasing metabolism and the production of greater energy for utilization, may possibly wear out our machinery a few years sooner; but we will have accomplished more, and are not left to that humiliating few years when we are useless to ourselves and those around us. The best inheritance that can befall the human engine is plenty of good fuel, well proportioned, plenty of oxygen to accelerate combustion, and plenty of exercise to use up the energy thus created.

Coming now to pathological conditions in nutrition and metabolism, we first consider inanition. This affection has a variety of causes, and it is generally secondary to some other disease. The most important causes are, first, lack of food, or lack of appetite, second, an insufficient absorption of material from the gastro-intestinal canal. Inanition is most frequently seen in diseases of the digestive system. If too little food is given, then the tissues begin to feed on the glycogen and stored fats in the body, and a minimum amount of proteids which are derived from the less important organs. During the first few days of a fast, proteid waste or nitrogen is freely eliminated. This is due to the proteids taken just before the fast began. Then the quantity gradually sinks to a minimum, although in the fourth or fifth day it may rise, owing to an exclusion of the glycogen. Toward the end, the primordial rise in nitrogen excretion shows the organs are consuming the organs themselves. Generally the less important organs are first sacrificed in starvation; these are the muscles and glandular tissues, while the heart and central nervous system are spared to the last.

THE PATHOLOGICAL DESTRUCTION OF PROTEID MATERIAL.

It has been previously stated that if we have an insufficient amount of proteid ingested, the tissues begin to live on the glycogen and stored fats.

In acute fevers, such as the infectious, the nitrogenous waste is enormous, due to increased metabolism and an attempt on the part of the protoplasmic cells to ward off toxemias. It also exists in such wasting diseases as cancer, tuberculosis and the anæmias. A pathological increase of nitrog-

enous excretion is of a most serious moment, for if it becomes impossible to maintain the patient's nutrition, the loss of proteids may prove fatal.

THE PATHOLOGICAL ACCUMULATION OF FAT.

No sharp line can be drawn between pathological and physiological quantities of fat in the body. We know it is necessary to have fat enough to retain the viscera in place, to maintain the elasticity of the spine and the arches of the feet. In fact, the persons who enjoy the best health are on the border line. A person should endeavor to keep his normal bodily weight about the same from year to year, and in consistence with his best feelings. Fat tends to accumulate in young persons in the muscles, in older persons in the mesentery, about the heart and kidneys. The individual who becomes too fat gradually becomes less and less able to work, and takes less exercise, perspires freely and is easily fatigued. Frequently the appetite increases, and thus arises a vicious circle of diminished activity, and increased fat storage. This is a simple problem in arithmetic.

The primary causes of obesity are first, a misappropriation between the energy taken into the body and that given off, an excessive diet of fats and carbohydrates, and in some individuals the proteids seem all to be burned, while the fats and carbohydrates are stored. Alcohol as a beverage certainly tends to increase obesity, as the alcohol furnishes not an inconsiderable amount of energy; and in the case of malt liquors we find a considerable percentage of carbohydrates. Moreover, the excessive drinker has less desire for exercise or work, thus again establishing the vicious circle of increased intake and absence of utilization of energy. Heredity plays an important part in this role, and family obesity is a common observation. Castration, by changing the habits from active to sedentary, tends to increase obesity.

There, however, still remains the unexplainable cause why some persons tend to lay on fat. Perhaps it may be due to functional activity of that portion of the protoplasmic cells whose duty it is to store away food for future combustion. It is well here to remember that anæmia, gout, arteriosclerosis, and the various forms of calculi are frequent complications of obesity.

Before closing this brief discussion we might well consider from a clinical standpoint the production of organic acids during metabolism. Carbonic and carbamic acids are constantly being eliminated during normal metabolism. These acids are not eliminated in the ammonium compounds, carbonic leaving the body through the lungs, and the ammonium salt of carbamic acid is transformed into urea in the liver and eliminated through the kidneys. The acids that are frequently eliminated as ammonium com-

pounds are oxybutyric and diacetic acids. Oxybutyric acid is most important. It appears in the urine not so very infrequently, and sometimes in large quantities. If this acid is oxidized it is changed into diacetic acid and later into acetone, and these three are sometimes called the acetone group, and are of a high clinical significance. All three are eliminated through the kidneys, and in addition, acetone may be eliminated in the breath, giving a characteristic, fruity odor. Normally, these acetone bodies are oxidized into carbon dioxide and water, and only traces at most of acetone are normally excreted in the urine.

The physiological effects of these bodies are similar to those of alcohol, and in children they may produce a feeling of fatigue—the patient becomes sleepy and stupid, the temperature falls and the heart action becomes rapid, nausea and vomiting may occur. Diabetic coma is nearly always of this type, and an increase of the acid will usually be found in the urine in these cases. It is well to remember that the sudden withdrawal of all starches and sugars in a diabetic may produce acidosis, followed by coma.

It is well in any case of gastro-intestinal irritation, where the cause cannot be satisfactorily explained, to examine the urine for diacetic acid. The test for diacetic acid is simple, and the technique is as follows:

Take some urine in a test tube, add a few drops of tincture of chloride of iron. If diacetic acid is present, a characteristic bordeaux red is seen. Certain drugs interfere with this test. This is sufficient evidence from a clinical standpoint that we have a condition of acidosis, and we are justified in giving large doses of some alkali, such as soda. This neutralizes the acid, and will often prevent a diabetic coma, and should always be administered when we have any suspicion that acidosis exists. No doubt many so-called toxemias, otherwise unexplained, are due to this acid group, and we should be careful of diagnosing toxemias and intestinal infections without testing the odor, the breath, and the urine for diacetic acid.

SURGICAL SUGGESTIONS.

In trachelorrhaphy care must be taken not to close the cervical canal at any point. [*American Journal of Surgery.*]

When tuberculous involvement of the Fallopian tubes is evident to the naked eye, pan-hysterectomy should be performed.

[*American Journal of Surgery.*]

Necrology.

JAMES MACOMBER BATES.

Dr. James Macomber Bates, a veteran member of the "Maine Medical," was born in Norridgewock, Maine, May 31, 1827, the youngest son of Dr. James Bates and Mary Jones his wife. The elder Dr. Bates was a very prominent surgeon, physician and citizen in his time, for he served two years as Surgeon in the Army in the War of 1812, was elected for two terms as Member of Congress, and was for several years the Superintendent of the Asylum for the Insane at Augusta. The central pavilion of that Institution was the design of Dr. Bates.

His son, the subject of this sketch, enjoyed, accordingly, unusual opportunities for an excellent education. After finishing his English and Classical studies at the Waterville Classical Institute, he began in 1848 the study of medicine with his father, at that time the Superintendent at Augusta, and also with that sterling old time practitioner, Dr. Hiram Hovey Hill, of Augusta. Later on he was graduated at the Jefferson Medical College, in Philadelphia, in 1851.

From that year onward he practiced in Sydney, Maine, until his father having retired from his position at Augusta established himself in Fayette and then in Yarmouth, Me., where his son followed him in 1858, and took up his father's practice, when he retired from age. Dr. Bates, Senior, lived to be over 93.

The younger Dr. Bates practiced in Yarmouth until the opening of the Civil War, when in December, 1861, he was commissioned surgeon of the 13th Maine Infantry and served with distinction during the Butler-New Orleans, the Banks-Red River, and the Sheridan-Shenandoah campaigns. In these four years he did much surgery, saw an immense number of patients, and then returning home to Yarmouth well enriched with experience, he practiced there with great success and satisfaction to the people, until age compelled him to retire. During the last few years of his life he met with the misfortune of losing his hearing, but continued his interest in medicine to the last, dying Sunday, July 9, 1911, at the age of over 84.

He was at one time President of the Cumberland County Medical Society, and later, of this Association, over both of which he presided with dignity and courtesy, associated with firmness in directing the proceedings; the papers were of the proper length, and the discussions were timed, to the limit of interest.

Dr. Bates was a first rate diagnostician, a careful surgeon, devoting himself considerably to uterine surgery, and was always an admirable ex-

ample of the capable country practitioner, knowing all of his capabilities, and infallibly recognizing when he had reached the limit of his skill, so that the advice of a specialist was for the good of his patient. Amongst his medical papers, I find those on "Uterine Tumors," "Uterine Abscesses," "New Remedies," and "Lister's Antiseptic Method." He was accurate and punctilious in his attendance on the various societies to which he belonged, he prepared himself beforehand for saying something on the paper proposed for discussion, and always did his share in keeping the proceedings alive, by speaking quietly, yet conservatively, and always to the point.

James Macomber Bates married October 11, 1855, Miss Hester A. Sawtelle of Sidney and lived with her congenially, celebrating their Golden Wedding in 1905. Dr. Bates is survived by a widow, a daughter, and by a son Dr. George Bates, who practices in the town which his father so many years honored with his dignified presence.

J. A. S.

ELBRIDGE AUGUSTUS THOMPSON.

Dr. Elbridge Augustus Thompson, of Dover, Maine, late Major and Surgeon of the 12th Maine Infantry, died suddenly from angina pectoris, on Wednesday, August 2, 1911, at the Isle of Springs, Maine, where he was in the habit of spending his summer vacation.

One of the oldest members of this Association, we pay this slight tribute to his memory.

He was born in Sangerville, Maine, January 1, 1828, the eldest son of James Thompson and Hannah Coombs his wife. He was an earnest student at Foxcroft Academy, had attended also at Bowdoin for two years. His money failing, he abandoned the classical course at college and began the study of medicine with the late Dr. Sumner Laughton, of Bangor, a man of high eminence in the profession. Later on, young Thompson took a course of lectures, was graduated in 1852 at the Castleton, Vermont, Medical School, and settled for practice in Charleston, Maine. With the beginning of the civil war he acted first as a contract Surgeon, was then appointed Assistant Surgeon and finally Surgeon to the 12th Maine Infantry. During his term of four years of service, he was attached in succession, to the Department of the Gulf, of the Red River, and finally of the Shenandoah under General Sheridan. When the war was ended he served for a while as surgeon to the Provost Marshal, at Bangor, and then established himself in Dover, Maine, where he practiced for the rest of his life. Here he served as Pension Examiner, Surgeon General of the State, member of the Governor's Council, Trustee of the Asylum for the Insane, at Augusta,

member of the Legislature and delegate to several National Republican Conventions.

Dr. Thompson was not only a most successful medical practitioner, but he was a remarkable instance of financial success; a combination rarely witnessed amongst physicians. As a financier he was President and Trustee of banks and trust companies, and managed all of them successfully and honestly. From the abundance of his means he not only gave the town a fine Public Library building in memory of his wife, but he had the foresight to endow it with money for its proper maintenance.

After more than 50 years of practice he retired from active work. He often attended the meetings of our Association, but does not seem to have permitted any of his contributions to medical advances to be printed.

He was twice married, first to Miss Marion Foss, of Charleston, Maine, who died in 1855, and again in 1858, to Miss Lucy A. Eddy, of Corinth, to whose memory he dedicated the Library mentioned above. J. A. S.

MORTON OLIVER EDWARDS.

This distinguished politician, agriculturist and physician was born at West Gardiner, Maine, March 8, 1853, the son of Oliver Edwards and Ellen Marston his wife. He died at Lewiston, Maine, September 22, 1911, after an illness of three months due to Bright's Disease. After an education in the common schools he taught school, worked on a farm and began rather late in life to study medicine, for I find that he was graduated at the Medical School of Maine at the age of 28, in 1881. He established himself at once at Monmouth, Maine, and interested himself not only in the practice of medicine, but was for some years the Postmaster of the town, and possessed a fine orchard. Later on he removed to Lewiston, where he was a practitioner of medicine, a member of the surgical staff of St. Mary's Hospital and likewise a member of the State Legislature and a State Senator, being swept up on the wave of Democratic victory high into the political councils of the state.

He belonged to many associations and societies, belonged also to the County and State Medical Associations, but time has not enabled me yet to discover any medical papers that he may have written.

Looking at his portrait one would call him a genial, charming man determined also to have his own way, though he would not do harm to others in obtaining what he wished. His great vacation consisted in looking over his orchards and in superintending the gathering and packing of his fruits. Politically, he worked hard for a Municipal Ice House for Lewiston, op-

posed the stealing of electric power from the state for uses outside of Maine, and was also a man prominent in Masonry and its philanthropic work.

He was twice married, first to Miss Clara De Fratus, who died in 1900, and again to Mrs. Maud Day, who survives him. Genial, delightful man, he left hosts of friends to lament him.

J. A. S.

BYRON PORTER.

Dr. Byron Porter, of Newport, Maine, the second by that name and title, was born at Dixmont July 10, 1828, where his father was then in medical practice. He died in Newport, Maine, April 6, 1911. He studied medicine with the celebrated surgeon, Dr. McRuer, of Bangor, and at the Medical School of Maine, where he was graduated in 1850. During his studies at Bowdoin he walked to and fro between Dixmont and Brunswick, and carried over his shoulder provisions to eke out his expenses. Whilst a student he began a lifelong friendship with the late Senator Fessenden, and later on during his intimacy with Mr. Blaine and Mr. Reed he did much to upbuild and support the Republican Party.

After practicing a while at Dixmont he moved to Newport, where he spent the rest of his life and practiced more than fifty years. He was an active member of the State, and of the Penobscot County, Medical Associations; but though punctual in attendance does not seem to have written much, medically.

In Newport he became a leader, supervised the schools, looked after the public health, and went once to the Legislature and could have gone continually had he been so inclined. He had a large country practice, administered to mental and bodily woes alike, and acted for years as nurse and physician too. He served, in all, four generations of families. He married Miss Almira B. Adams, and survived her six years, leaving two sons, practitioners of medicine, one of them D. C. B. Porter of Old Town, being a member of our Association.

Dr. Porter was a character in his way, and in his old age was called "Father" Porter. During his last illness he regretted that he had not enjoyed the advantages of modern life. He was sorry that he had always drank water out of a well, instead of having the water carried into his house as others did.

J. A. S.

JOURNAL OF MAINE MEDICAL ASSOCIATION

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Editorial Comment.

The Annual Meeting.

Although the date of the next meeting of the State Association is still some months in the future, we would call attention to several points, which if observed, will materially benefit the next session. A maximum time has been set which an essayist may occupy in the presentation of his paper, also the length which may be devoted to discussion by any member, and it is upon these two points we would direct attention. This limit of time has been reasonably fixed for a terse presentation of one's topic, but that this rule has been abused by many essayists and members taking part in the discussion is a well known and unpleasant fact. The presiding officer certainly commits an injustice, when he does not require both essayists and those taking part in the discussion to the specified limits, not only to the other essayists who have prepared, but to all members and those who have had the labor of preparing the program. Many members have gone to extreme pains to prepare papers which are worthy of our attention and earnest discussion and it is manifestly unfair to them to ask them to read their paper by title, simply because the time of the session has been occupied by members who have been neglectful of the courtesy due their fellows on the program. Postponement of discussion for this same reason does not obtain for the best interest in the paper and a great many times this discussion affords us valuable points.

Limitation of individual efforts should also go hand in hand with limitation of the number of papers presented at each session. A careful computation of the time which is at our disposal should be made by the committee and care taken that the program be not overcrowded. Due allowance

should be made for time sufficient to discuss each paper, and to help the presiding officer, members should be in readiness so that each session can be opened upon scheduled time.

Embarrassment of the committee by members failing to present papers, after having signified that they would do so, without adequate reason for their absence, is a matter we should not pass by lightly and such a member should be denied the privilege of presenting a paper before us until he is made aware that the word of a gentleman is usually sufficient. We may be considered antique in entertaining such an opinion, but when we remember the large amount of work that befalls the scientific committee, to prepare a program, it seems as if each member of the Association should be willing to do his share.

F. H. J.

Medical Defense Fund.

Would not the establishment of a Medical Defense Fund be of value to the individual members of State and County Medical Societies, and afford such member protection at small cost, and give him more positive value for his annual dues as an added inducement for membership in the County or State Society? There are some five hundred physicians in this state who are now not members of our state body for the probable reason that it does not seem to offer sufficient inducements.

The State Journal and the Maine Medical Library have already been started. The question now arises: Will a Medical Defense Fund be an additional step in advance? We are quite familiar with the fact that back of all suits for alleged malpractice is a lawyer and a physician. Neither the country physician nor his city brother is exempt from this danger. Those most liable, of course, are the ones engaged in the practice of surgery and especially those dealing with accident work. It is true that many of those members are amply protected by insurance already, but it is also true that such insurance policies do not protect them from unjust criticism and slander as sequence to such suits. Suppose, for example, that the State Association added a Medical Defense Fund to its present inducements for membership, with the definite provision that any member appearing in suit against another member shall lose his membership, if, after thorough investigation of his testimony, the facts in the case showed that the evidence given exhibited ignorance, malice or a dishonorable attitude on his part. Physicians in the rural districts could be more readily induced to become members, and the majority of physicians and surgeons in the city would doubt-

less gladly pay the small increase in annual dues toward a fund that would give them greater security from having to appear as defendant in an unjust suit.

The physician unable to attend his county meeting now has the advantage that he may keep posted through the columns of the Journal regarding the transactions of each meeting. If he wishes to look up any medical subject and it is not convenient for him to visit the Library, he has only to send to the Librarian and he will receive such data bearing on the subject as the Library may possess. Now, if in addition to this he is defended by the Association in cases of alleged malpractice, and the conduct of any physician most critically scrutinized who may testify against him, will this not be an added inducement, and a strong one, to keep our present membership from falling off and to present to the five hundred or more men outside the State Association, the majority of whom should be on its roll of membership.

Advertising Sheets and their Subscription Lists.

It has always been a wonder to us how certain advertising sheets, which pose as medical journals, get their subscription lists. It is evident, of course, that few physicians will pay out real money to get these advertising propositions. On the other hand the postal regulations permit only a small per cent. over the regular subscription list to be sent out in addition. Therefore these publications will not be profitable to the firms that patronize them, unless in some way the subscription list is padded out. One way in which this is being done is well shown in *The Journal A. M. A.* (J. A. M. A., November 11, 1911, p. 1629). The scheme there described is an excellent one, for it secures "original contributions" for these "medical journals" and at the same time provides a subscription list. The plan is simple. It appears that the "*American Journal of Physiologic Therapeutics*" and "*Successful Medicine*" are run for the money that can be gotten from advertisers. The Journal A. M. A. having questioned the therapeutic value of ozone, the editor of the before named journals now offers to physicians a year's subscription to the first, or five years' subscription for the second for a report on their experiences with ozone and in particular the "oxyoline treatment" which is a good advertising patron. As none will have the temerity to expect a free subscription without giving something in return, the nature of these reports will no doubt be a satisfactory boost for "oxyoline."

W. A. P.

Abstracts of Current Literature.

UNDER THE CHARGE OF THE MEDICAL REVIEW CLUB.

William L. Cousins, M. D.,	P. P. Thompson, M. D.,	Edwin W. Gehring, M. D.,
A. H. Weeks, M. D.,	Frank W. Lamb, M. D.,	C. R. Burr, M. D.,
T. J. Burrage, M. D.,	Harold J. Everett, M. D.,	W. Bean Moulton, M. D.,
Roland B. Moore, M. D.,	H. A. Pingree, M. D.,	Fred. P. Webster, M. D.,
F. J. Welch, M. D.,	Frank Y. Gilbert, M. D.,	P. W. Davis, M. D.,
		H. E. Milliken, M. D.

(Boston Medical and Surgical Journal, November 16, 1911.)

Sciatica, Etiology and Treatment. By Mark Rogers, M. D., Boston.

Dr. Rogers writes a very instructive article on the present day conception of sciatica, illustrating the etiology and treatment of the condition by means of cases. He first renews the usual text-book description of sciatica, which gives as the etiology, rheumatism, trauma, cold, and pelvic conditions, and as the pathology, a peri-neuritis. Treatment consists in drugs and counter-irritants applied to the nerve. The author believes that all this is entirely wrong, and he writes this paper to show that outside of pelvic tumors, tuberculosis and hypertrophic arthritis of this region, the so-called idiopathic sciatica will always have its cause in some lesion of the sacro-iliac joint. Trauma of the joint, acute or chronic strain; or dislocation are the common causes of sciatic pain. Examination shows pain and tenderness over the sciatic nerve and sacro-iliac joint, with restriction of the motion of the spine, and in severe cases a difference in the relation of the posterior superior spines. An X-Ray study of the joint in severe cases is of great aid in excluding tuberculosis. He takes up in detail simple sprain of the joint, dislocation, chronic sprain, adhesions in the joint, and long standing dislocation, citing cases illustrating each condition. Treatment consists in strapping the joints with adhesive plaster in simple cases and in the more severe cases wearing a plaster jacket or girdle. When there are adhesions they should be broken up under ether and dislocations must be reduced.

THOMAS J. BURRAGE.

(Annals of Surgery, November, 1911.)

Obesity and Its Surgical Treatment by Lipectomy. By Edward Castle, of San Francisco, Cal.

By Lipectomy—a name given the procedure by Kelly, in 1910—the author describes the indications and technique of removing large masses of redundant subcutaneous fat, especially in cases of pendulous abdomen.

Persons so afflicted cannot take proper exercise to reduce their fat and accordingly often suffer from the sequellæ of sedentary habits and the excess of weight, such as broken arches, varicose veins and ulcers, incompetent digestion, constipation and myocardial changes.

Although the operation is one of the simplest in surgery and the relief gained is marked, the author thinks that it has not received the attention it deserves, because since it was first called to the attention of the profession in 1890 by Demars and Marx, very few cases have been reported. He thinks that a large number of persons so afflicted would submit to the extirpation of the excess of such circumscribed areas of fat if their surgeons would suggest it and would advise them as to its ultimate benefits.

The operation consists of a transverse elliptical incision surrounding the area to be removed, extending, if need be, from three inches lateral to the lumbar vertebræ to a corresponding point on the opposite side and carried down to the deep fascia. The enclosed skin and subcutaneous fat is then shaved off *en masse* and the wound closed.

An illustrative case with photographs is given, the patient leaving the hospital in thirteen days minus sixty-five pounds of fat and able to work with more comfort than she formerly felt when at rest.

W. BEAN MOULTON.

A Review of Seventy-three Cases of Dudley's Operation for Dysmenorrhœa and Sterility. By Samuel N. Brickner, A. M., M. D., of New York, Associate Attending Gynecologist, Mt. Sinai Hospital.

The history of the operation of discission of cervix since 1843 briefly outlined. Then follows a series of cases in which the operation was performed, first described in 1891 by E. C. Dudley of Chicago, a total of 106 cases, in which the end results were followed out in 73. These were selected with great care. No patient was subjected to operation with pelvic inflammatory disease or gross pathological lesion, diabetes, nephritis, tuberculosis or grave cardiac disease. Contracted pelvis was not considered a contraindication. The usual picture was a small anteфлекed uterus with a long cervix pointed forward.

The operation consisted of a very thorough dilatation of the cervix with a curetage, followed by a deep sagital suture through the posterior cervical lip and the removal of a wedge-shaped portion of tissue, sutures then inserted in such a way as to bring the new os pointing directly backward in the normal position, thus easily admitting the sound and in the most receptive position in coitus.

In a mixed series of cases taken from ward and private rooms, he found the dysmenorrhœa relieved in 64 per cent. and the sterility in 27 per cent. In his private patients there was relief of dysmenorrhœa in 84 per cent. and of sterility in 42 per cent.

Conclusions: Dudley's sagittal incision is a procedure to be recommended.

The results are better in dysmenorrhœa than in sterility.

Labor is not interfered with, as the scar heals by first intention. Pathological ante flexion and retroflexion, with stenosis of external or internal os a frequent cause of much cases.

Thorough study of each case should be made, as well as an examination of the husband for the potency of the seminal fluid should be made before the procedure is resorted to.

About 50 per cent. of cases relieved.

H. E. MILLIKEN.

(American Journal of Obstetrics, November, 1911.)

Early Diagnosis of Ectopic Pregnancy. By R. R. Huggins, M. D., of Pittsburg, Pennsylvania.

The writer believes that the diagnosis should be made previous to rupture in at least eighty per cent. of all cases. Previous history of a tubal infection is an important factor, though it may have occurred years before. Delayed menstruation with abnormal pain in one who has previously been regular, changes from the usual color of the flow, softening of the cervix, enlargement of the uterus to a less extent than would be expected from normal pregnancy, and finally, palpation of the enlarged tube itself, are the signs upon which the diagnosis is based. Fourteen cases are cited as examples of the author's success in early diagnosis.

Diseases of the Thyroid in the Female. By Miles F. Porter, M. D., of Fort Wayne, Indiana.

Attention is called to the theory that hyper-activity of the thyroid is a safeguard against puerperal toxemias and infections, and two cases are presented in support of this theory. Two other cases of amenorrhœa due to perverted thyroid function are presented, both of which improved under treatment directed wholly toward the thyroid.

ROLAND B. MOORE.

Book Reviews.

Dorland's American Illustrated Medical Dictionary. The New (6th) Edition Revised. Dorland's American Illustrated Medical Dictionary. A new and complete dictionary of terms used in Medicine, Surgery, Dentistry, Pharmacy, Chemistry, Veterinary Medicine, Nursing, Biology, and kindred branches; with new and elaborate tables. Sixth Revised Edition. Edited by W. A. Newman Dorland, M. D. Large octavo of 986 pages, with 323 illustrations, 119 in colors. Containing over 7,000 more terms than the previous edition. Philadelphia and London: W. B. Saunders Company, 1911. Flexible Leather, \$4.50 net; thumb indexed, \$5.00, net. W. B. Saunders Company, Philadelphia and London.

Before opening this book I thought myself well posted after many years of practice, but a study of its pages has proved to me that I know but little concerning modern medical words. That being the case I have taken unusual pains to examine this, the first medical dictionary that I have looked into for years. To me, then, it seems perfection with its nice clear print, its excellent paper and illustrations, whilst the pronunciation appended to every word adds enormously to its usefulness. It seems to contain all that is modern and up-to-date, although many of the spellings annihilate the possibility of understanding the derivations of many words. So long, however, as most modern physicians do not care at all for the derivations of words, this may be a matter of small importance.

Of the few omissions that I have noticed, one is under "Salvarsan," which is said to be administered either subcutaneously or by the intra-muscular method. Here, the author omits the intravenous method, which is very largely employed, and is held to be safest and surest. Nor can the word "Subcutaneous" be defended, so long as we employ "Hypodermatic" or "Hypodermic" Syringes, for this method. So too under "Syphilis" Salvarsan is omitted in the treatment. I was also at loss in not finding "Herxheimer's Reaction" mentioned in a recent German work.

I would like to see in another Edition, a List of Fashions in Medicine during the Christian era, for from it we could quickly call attention of Legislators to the folly that our ancestors would have committed in legalizing such absurdities, and show them their present folly in legalizing the opometries and osteopathies, and so on, of to-day.

Ignorance of other Medical Dictionaries prevents me from asserting that Dorland's is the best of them all, but, truthfully speaking, it satisfies my needs; with it at hand I feel able to understand the most wonderful terms employed in modern medical linguistics, and so I commend it most highly to the profession.

J. A. S.

What to Eat and Why. By G. Carroll Smith, M. D., of Boston, Mass. Octavo of 310 pages. Philadelphia and London; W. B. Saunders Company, 1911, cloth, \$2.50.

The aim of this work is set forth in the preface, where the author tells us that it is his desire to write a book "describing the fundamental elements of food and the principles underlying its use."

Pursuant to this plan, he discusses in the Introduction the composition of the human body by wit: Water 59 per cent.; fat 21 per cent.; albumen 9 per cent.; gluten, chondrin, elastin, skin, hair, etc., 6 per cent.; ash 5 per cent., and the elements into which these can be resolved.

Then foods are described in a general way, their composition and the energy they are capable of producing (as measured by the calorie).

Thus protein, carbohydrates, fats, water and body salts are considered as well as condiments and alcohol.

Finally the experience thus gained is assembled in rules for the selection of a diet in a given case, the chief questions to be answered being:

1. How much protein to give.
2. What shall be the proportion of fats and carbohydrates.

Chapters upon the dietetic treatment of various medical diseases follow, including a few diet lists and receipts, while the chemistry of foods is touched upon. The book while not exhaustive is eminently practical and ought to prove helpful.

C. R. B.

The Practitioner's Visiting List for 1912. An invaluable pocket-sized book containing memoranda and data important for every physician, and ruled blanks for recording every detail of practice. The Weekly, Monthly and 30-Patient Perpetual contain 32 pages of data and 160 pages of classified blanks. The 60-Patient Perpetual consists of 256 pages of blanks alone. Each in one wallet-shaped book, bound in flexible leather, with flap and pocket, pencil with rubber, and calendar for two years. Price by mail, postpaid, to any address, \$1.25. Thumb-letter index, 25 cents extra. Descriptive circular showing the several styles sent on request. Lea & Febiger, Publishers, Philadelphia and New York.

Physicians who are already familiar with this convenient pocket memorandum will again welcome the 1912 edition. The fact that this is its 28th year of issue indicates its popularity with those practitioners who prefer a concise business memorandum rather than the more complicated and expensive systems so much advertised of late. The work contains among other valuable information, comparative tables of weight and measures of the metric system, including the centigrade scale, poisons and antidotes,

incompatible drugs, a table of doses, a table of diseases arranged alphabetically and applied therapeutics, a diagnostic table of eruptive fevers, tests used in the examination of urine, and directions for the ligation of arteries. Printed on fine tough paper suitable for either pen or pencil, bound with handsome grained leather, the work will undoubtedly maintain its deserved popularity.

H. E. M.

Ophthalmic Myology. A Systematic Treatise on the Ocular Muscles.

By G. C. Savage, M. D., Nashville, Tenn.

This book is the second edition, the first edition having been issued in 1902. This edition consists of 685 pages, divided into 12 chapters with 84 illustrations and 6 plates. The first edition of this work was exhausted three years ago showing that there was a demand for it in ophthalmology. The delay in issuing the second edition has given the author time to thoroughly revise the work and to make the views expressed more lucid and tentable. The author says he has been at a disadvantage in that his teachings have not been in accord with those of the immortal Helmholtz.

He says: "The whole of the difference between the teaching of Helmholtz and that of the author hinges on the correct answers to the following four questions: (1) Is the center of the cornea always the anterior pole? (2) Is the central point of the macula always the posterior pole of the eye? (3) Do all secondary visual lines cross the visual axis at the nodal point? (4) Do all secondary visual lines cross the visual axis at the center of retinal curvature—the center of rotation? To question (1), Helmholtz' answer was 'yes,' but the author's answer is 'no'; to question (2), the author's answer is 'yes,' but Helmholtz' answer was 'no'; to question (3), Helmholtz' answer was 'yes,' but the author's answer is 'no'; to question (4), the author's answer is 'yes,' but Helmholtz' answer was 'no.'

"The unbiased reading of the first chapter of this edition will convince the most skeptical that the central point of the macula is the posterior pole of every eye, whether it be the ideal or the non-ideal eye; that the center of the cornea is the anterior pole of the ideal eye only."

The eye is developed in response to light and motion, for in the lowest form of animal life there are ocelli as long as the animal moves about. When, however, it becomes attached and fixed to something it loses its ocelli. In the Mammoth Cave, and in the depths of the ocean where it is absolutely dark, the fish that inhabit these waters have no eyes because there is no light and no stimulus to develop them. If the eye comes into existence in response to light and motion of an animal it is evident that it

not only guides that animal about but that the light guides and directs the eye. Therefore, it seems reasonable to regard the macula as the posterior pole of the eye because it is always placed directly in line of the object looked at, and that the center of the cornea is the anterior pole in only the ideal eye. Dr. Savage has demonstrated conclusively that there are nine conjugate innervation centers, five for controlling the action of the four recti muscles and four for controlling the action of the two oblique muscles of the eye.

The conjugate innervation centers are not always active in the early days of the infant as the eyes do not move together in all directions. Their functions are brought into existence in response to light and motion guided by the most sensitive part of the retina, namely the macula lutea; hence the visual axes are the poles of the eyes and the lines upon which they rotate. These immerge at the center of the cornea in the ideal emmetropic eyes, but not so in the ametropic eyes.

There are some typographical errors which bother the beginner, as for instance, in describing the plane of reference, a letter of one plane is used in describing that of another. Dr. Savage has devised a muscle indicator, it being a primary isogonal circle, by which all movements of the eyes may be demonstrated on the supposition that the macula is the posterior pole of the eye.

The first chapter is one that requires close study, as it involves questions of the greatest magnitude, which must be thoroughly mastered in order to understand the fundamental principles upon which Dr. Savage stands. It gives evidence of great study and a mastery of the subject, and his logic is such that it carries one irresistably to his conclusions.

The other chapters of the book are written in a clear lucid style and apply the principles taught in the first chapter to the defects of the imbalance of the muscles of the eye under the heads of heterophoria and heterotopia,—the latent and manifest deviations of the two eyes as used in every day life.

E. E. H. JR.

SURGICAL SUGGESTIONS.

Vaginal hysterectomy is more dangerous than abdominal hysterectomy when the uterus is adherent. *[American Journal of Surgery.]*

Simple perforation of the uterus during a curettage in an aseptic field requires no further treatment than a packing of gauze in the uterus.

[American Journal of Surgery.]

County News.

CUMBERLAND.

CUMBERLAND COUNTY MEDICAL SOCIETY.

The Annual Meeting of the Cumberland County Medical Society was held Friday evening, December 8th, at the Congress Square Hotel.

The meeting was called to order with Dr. C. W. Foster, Vice President, in the chair. There were present seventy-five members and twelve invited guests. The records of the last meeting were read and approved.

The annual reports of the Secretary and Treasurer were read, accepted and ordered to be placed on file.

Dr. Gehring read the following amendment to Section 1, Chapter 1, of the By-Laws, which was laid on the table until the next meeting.

BY-LAWS.

CHAPTER I. MEMBERSHIP.

Section 1. The Society shall judge of the qualification of its members, but as it is the only door to the State Medical Association and to the American Medical Association, for physicians within its jurisdiction, every reputable and legally qualified physician in Cumberland County, who does not support or practice or claim to practice sectarian medicine, shall be eligible to membership.

This section shall be amended to read as follows:

Section 1. The Society shall judge of the qualification of its members, but as it is the only door to the State Medical Association and to the American Medical Association, for physicians within its jurisdiction, every reputable and legally qualified physician in Cumberland County, who does not support or practice or claim to practice sectarian medicine, and who has practiced medicine in said county during the twelve months immediately preceding the date of his application, shall be eligible to membership.

(This section shall not conflict with Section 3 of the by-laws).

The question was submitted to the Society as to whether the expenses of the banquet for 1911 should be paid from the funds of the Society. After considerable discussion, it was voted 17 to 11 that they should be so paid.

This being the annual meeting, the following officers were elected: President, Dr. John F. Thompson; Vice-President, Dr. J. L. Horr; Secretary, Dr. Philip P. Thompson; Treasurer, Dr. Daniel Driscoll; Censor for 3 years, Dr. E. W. Gehring; Delegate to Maine Medical Association, Dr. J. F. Thompson, ex-officio.

After the election of officers the meeting was adjourned to the dining

room, where a fine banquet was served. After the banquet Dr. C. W. Foster presented the speaker of the evening, Dr. W. Gilman Thompson, of New York City, Professor of Medicine in Cornell University Medical School. Dr. Thompson presented a splendid original paper on "Occupation Diseases of Modern Life." The paper showed a most careful and thorough study of these diseases from the large clinical sources available to Dr. Thompson and many new thoughts were presented on the subject. After the paper, Dr. Woods Hutchinson, of New York, a special guest of the evening, was called upon, and in his unique style gave us some further ideas on the subject of Occupation Diseases, with special emphasis on methods of prevention. After Dr. Gordon had extended the voted thanks of the Society to Dr. Thompson, the meeting was adjourned at eleven o'clock.

PHILIP P. THOMPSON, *Secretary*.

PORTLAND MEDICAL CLUB.

The annual meeting of the Portland Medical Club was held Tuesday evening, December 5th, at the Falmouth Hotel.

The officers for the next year were elected as follows: President, Dr. Daniel Driscoll; 1st Vice President, Dr. John F. Thompson; 2d Vice President, Dr. Harold A. Pingree; Secretary-Treasurer, Dr. Harold J. Everett; Censors, Dr. Bertrand F. Dunn, Dr. Alfred Mitchell, Jr., Dr. Ernest W. Files.

At the suggestion of Dr. Hatch it was voted to have in October an open meeting under the charge of the Public Health Committee of the American Medical Association, and she, together with the president elect, were appointed to make arrangements for it.

Fifty-five members enjoyed the Annual Banquet, after which they listened with pleasure to President Weeks, who delivered an instructive paper upon "Dietetics."

In place of the Annual Oration by Dr. Addison S. Thayer, who was confined to his house, Dr. William L. Cousins entertained the members by an account of the Surgical Congress which he had lately attended in Philadelphia.

A committee was appointed to express to Dr. Thayer the regrets of the Club at his being unable to attend.

Adjourned at 10:30.

HAROLD J. EVERETT, *Secretary*.

WESTBROOK MEDICAL CLUB.

The regular meeting of the Westbrook Medical Club was held at the home of Dr. L. L. Hills.

Dr. E. W. Gehring, of Portland, read a paper "Concerning the Importance of Attention to Details in the Practice of Medicine."

The paper showed carefulness of thought and thoroughness in preparation and was greatly enjoyed by all present.

F. L. FERREN, *Secretary*.

ANDROSCOGGIN.

The annual meeting of the Androscoggin County Medical Association was held Tuesday, December 4th, in the Court Room of the City Building. The paper of the evening was read by Dr. S. E. Sawyer and the subject was "Constipation."

It was discussed by all members present.

The following officers were elected for the year 1912: President, Dr. E. V. Call; Vice President, Dr. W. L. Haskell; Secretary-Treasurer, Dr. J. W. Scannell; Board of Censors, Dr. H. E. E. Stevens, Dr. L. P. Ducharme, Dr. A. W. Plummer.

The attendance at the meeting was unusually large and much enthusiasm for the coming year's work was expressed.

J. W. SCANNELL, *Secretary*.

FRANKLIN.

The Franklin County Medical Society held its regular meeting December 15th, at Farmington. The following officers were elected for 1912: President, Dr. B. F. Makepeace, Farmington; Vice President, Dr. O. B. Head, New Sharon; Secretary, Dr. G. L. Pratt, Farmington; Treasurer, Dr. J. W. Perkins, Wilton; Censor for three years, Dr. W. B. Sanborn, Farmington.

Stanley P. Warren, M. D., of Portland was present and talked on matters of interest to the profession, after which he read a very interesting paper on "Cæsarean Section."

G. L. PRATT, *Secretary*.

KENNEBEC.

WATERVILLE CLINICAL SOCIETY.

The regular meeting of the Waterville Clinical Society was held at Royal Café on Monday evening, December 18th.

The paper of the evening was read by Dr. Edson E. Goodrich, Subject, "Surgical Correction of Deformity Caused by Infantile Paralysis," with presentation of a case.

Banquet was served at seven-thirty.

EDSON E. GOODRICH, *Secretary*.

The annual meeting of the Augusta Medical Club was held at the Augusta House, December 11, 1911, at 8 P. M. The retiring President, Dr. O. C. S. Davies, called the meeting to order. The following officers were elected for the year 1912: President, R. H. Stubbs; Vice President, Dr. W. S. Thompson; Secretary and Treasurer, Dr. H. W. Miller. The Standing Committee: Chairman, Dr. A. H. Sturtevant; Dr. H. K. Stinson and Dr. R. L. McKay. The paper of the evening on "Toxic Foods" was presented by Dr. A. H. Sturtevant. The reader discussed toxic affect of various foods in a clear and sustained manner. A general discussion followed the reading of the paper.

OXFORD.

The sixty-third quarterly meeting of Oxford County Medical Society will be held at Cobb's Hotel, Mechanic Falls, Wednesday, December 27th, 1911, at about 10:30 A. M.

In accordance with our by-laws the officers for the ensuing year will be elected at this meeting.

A paper on Cæsarean Section with Skiagraphs of Pelves, will be read by Dr. Stanley P. Warren, of Portland.

A paper will be read by Dr. R. R. Tibbetts, of Bethel.

Come prepared to report your most interesting clinical case and a successful meeting will be assured. D. M. STEWART, *Secretary*.

SOMERSET.

The semi-annual meeting of the Somerset County Medical Association was held at the Somerset Hotel, North Anson, December 7, 1911.

New officers were elected as follows: President, W. S. Milliken; Vice President, W. S. Stinchfield; Secretary and Treasurer, H. W. Smith.

Dr. Stanley P. Warren, of Portland, gave us a very fine paper on "Cæsarian Section."


Dr. Campbell, of Augusta, was with us.

Dr. H. W. Smith was chosen as a delegate to attend a meeting to be held in Portland to take some action in regard to Medical Charities, Insurance by the State Association, and health matters, and laboratory problems.

H. W. SMITH, *Sec'y and Treas.*

PENOBSCOT.

At a regular monthly meeting of the Penobscot County Medical Association, held at the Bangor House, Tuesday evening, Dr. Forrest C. Tyson,



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Approved professionally.**

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Palatable,
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Physicians have been able to prescribe to advantage

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in cases in which cod-liver oil is indicated. Hydroleine is pure Norwegian cod-liver oil emulsified in a manner which makes it extremely utilizable. It is without medicinal admixture. Sold by druggists.

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Sample will be sent to physicians on request.

Assistant Superintendent of the Eastern Maine Insane Hospital, read an interesting paper on Insanity, with particular reference to dementia præcox. It was listened to with marked attention by the 30 physicians who were gathered about the tables in the new private dining room where dinner was served.

In the discussion which followed the paper there was much criticism of the present conditions regarding the detention of insane persons at the police station during the time it is necessary to hold them before they can legally be committed to the hospital by the municipal officers.

A committee, consisting of Dr. William C. Mason, Dr. Daniel McCann and Dr. William P.

McNally, was appointed to go before the city government to explain the situation and see if some more satisfactory arrangements cannot be made.

The present state law requiring that 24 hours' notice be given a person before the municipal officers and a hearing held regarding his sanity came in for much criticism. Although no formal vote was taken on this question the doctors were practically unanimous in declaring that the law ought to be changed.

JOHN THOMPSON, *Secretary*.

WASHINGTON.

The Annual Meeting of the Washington County Medical Society met in the City Rooms, Calais, December 14, 1911. President Chas. E. Johnson, M. D., of Princeton, in the chair. Minutes of previous meetings read and approved. Upwards of 22 doctors were present.

An interesting paper entitled "Histo-pathology of Cancer" was read by E. V. Sullivan, M. D., of St. Stephen.

Second paper was "Cancer of the Liver" with report of a case" by J. R. C. Byron, M. D., of Eastport.

BRONCHIAL COUGHS

and other respiratory affections so often owe their intractability to malnutrition and debility that vigorous tonic medication always forms one of the first and most important indications for their treatment. The results that uniformly follow the use of

Gray's Glycerine Tonic Comp.

in this class of affections, prove the wisdom, therefore, of "treating the patient as well as the disease." The exceptional efficiency of this time-tried tonic in all diseases of the air passages has led to its widespread recognition as one of the general practitioner's most dependable allies in his annual conflict with winter coughs and colds.

Its results moreover, are permanent—not transitory.

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Dr. H. H. Best, of Pembroke, read his paper entitled "Cancer, its Etiology and Medical Treatment with some statistics on its increase and prevalence." After this there was much discussion on the subject of Cancer by a number of the doctors present, including Doctors Potter and Henderson, U. S. Veterinary Surgeons of this city.

The business pertaining to the annual meeting followed. Dr. J. R. N. Smith, of Milltown, was elected President; Dr. E. V. Sullivan, of St. Stephen, Vice President; Dr. H. B. Mason, of Calais, elected Secretary-Treasurer; Dr. H. H. Best, of Pembroke, was elected a member of the "Board of Censors" for three years in place of Dr. Walling, of Milbridge, whose term had expired. Dr. R. A. Holland, of Calais, was elected Delegate to the State Medical Society, with Dr. M. L. Young, of Oak Bay, alternate for the term of two years. Dr. S. E. Webber was re-elected for three years to serve on the Health and Legislature Committee. Dr. W. H. Bunker's application for membership was read and laid on the table.

The Society was very much pleased at having Dr. F. H. Jackson, of Houlton, present. His discussion of the papers and his talk on "State Cancer Commission" was very interesting.

During the evening a very interesting public meeting was held under the supervision of the "State Cancer Commission." That meeting was held in Red Men's Hall. Dr. S. E. Webber, a member of the State Cancer Commission, acted as chairman. A very interesting paper was read by Dr. M. L. Young, of Oak Bay, and also by Dr. F. H. Jackson, of Houlton. Short but appropriate addresses were made by Dr. Bennet, of Lubec, Mayor H. J. Dudley, of Calais, and Rev. J. Cromwell Hughes, B. A., of Calais, Hon. Geo. J. Clarke, of St. Stephen. Dr. Stanley P. Warren, of Portland, and Dr. Wm. C. Peters, of Bangor, were to be present and take part on the program but were unavoidably absent.

After the meeting, the St. Croix Medical Society entertained all the visiting physicians and the speakers of the evening and others at a banquet given at the St. Croix Hotel. Dr. H. B. Mason, of Calais, President of the Society, acted as toast-master, and a very pleasant time was spent.

PERSONAL NEWS AND NOTES.

A new sterilizing plant valued at \$1,000 has been added to our Hospital in St. Stephen. This was given by H. B. Eaton, of Calais. This is the third time Mr. Eaton has shown his generosity in such a good cause.

Dr. W. Everett Gray, of Milltown, N. B., is visiting his home in St. John for Christmas holidays.

Dr. W. N. Miner was called to Deer Island last week.

Dr. J. D. Lawson, of St. Stephen, is confined to the house by illness.

Miss Branscomb, Matron of Chip Memorial Hospital, is visiting her home in St. John for holidays.

Dr. R. A. Holland is out of town for a few days.

Dr. Joseph B. Drummond, of Portland, was married to Miss Randall of Augusta last Thursday evening.

Dr. Woods Hutchinson, of New York, spoke before the Civic Club Friday evening, December 8th, on "Foods and Foolishness," and was entertained as the guest of the Cumberland County Medical Association the same evening.

Drs. Fuller, Marston and Fox, of Bath, Dr. Purington of Kennebunk, and Dr. Kendall, of Biddeford, were present at the Annual Meeting of the Cumberland County Medical Association.

Dr. Harvey Wiley, of Washington, D. C., recently addressed the Economic Club of Portland, on the subject of "Economy of Health." He

spoke in a most interesting manner of the work done during the past years, finally closing with a statement that he hoped to see a quiet, peaceful death as the termination of a prolonged useful life. An abstract of Dr. Wiley's lecture will appear in the February issue of the Journal.

Dr. Frank Jackson, of Houlton, was in Portland recently on his stopping over one train on his return home from Boston.

Dr. R. A. Parker, of Auburn, was thrown from his carriage last week and received a double fracture of the tibia.

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Maine Medical

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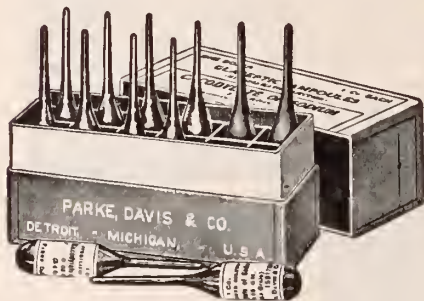
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1. **Adrenalin Chloride Solution, B 1** (1:10,000). 1 Cc. ampoules.
2. **Adrenalin Chloride Solution, B 2** (1:1000). 1 Cc. ampoules.
3. **Caffeine and Sodium Benzoate**, 0.5 Gm. ($7\frac{1}{2}$ grains); Equivalent to 0.25 Gm. ($3\frac{3}{4}$ grains) Caffeine and an equal amount of Sodium Benzoate. 2 Cc. ampoules.
4. **Camphor in Oil**, 0.2 Gm. (3 grains). 2 Cc. ampoules.



5. **Codrenin, B "C"**: Adrenalin Chloride, 0.0001 Gm. (1:10,000); Cocaine Hydrochloride, 0.0025 Gm. ($\frac{1}{4}$ of 1%). 1 Cc. ampoules.

Ergot Aseptic (equivalent to 30 grains Ergot). 1 Cc. ampoules.

6. **Eudrenin, B "B"**: Adrenalin Chloride, 0.0001 Gm. (1:10,000); Beta Eucaïne Hydrochloride, 0.0025 Gm. ($\frac{1}{4}$ of 1%). 1 Cc. ampoules.
7. **Iron Citrate (Green)**, 0.13 Gm. (2 grains); Iron and Ammonium Citrate (Green), 0.13 Gm. (2 grains); Quinine and Urea Hydrochloride (as a local anesthetic), 0.005 Gm. ($\frac{1}{2}$ of 1%). 1 Cc. ampoules.
8. **Iron Arsenite**, 0.065 Gm. (1 grain); Iron Arsenite with Ammonium Citrate. 1 Cc. ampoules.

No.

9. **Iron Arsenite and Strychnine**: Iron Arsenite with Ammonium Citrate, 0.065 Gm. (1 grain); Strychnine Nitrate, 0.001 Gm. ($\frac{1}{80}$ grain). 1 Cc. ampoules.
10. **Mercuric Iodide, Red, 1% (Aqueous)**: Mercuric Iodide, Red, 1% ($\frac{1}{8}$ grain); Soluble Salt of Para-amido-ethyl-benzoate (as a local anesthetic), 1% ($\frac{1}{8}$ grain); Potassium Iodide, 1% ($\frac{1}{8}$ grain); Distilled Water, q. s. 1 Cc. ampoules.
12. **Morphine and Atropine, B "A"**: Morphine Sulphate, 0.016 Gm. ($\frac{1}{4}$ grain); Atropine Sulphate, 0.0006 Gm. ($\frac{1}{160}$ grain). 1 Cc. ampoules.
13. **Morphine and Atropine, B "B"**: Morphine Sulphate, 0.008 Gm. ($\frac{1}{8}$ grain); Atropine Sulphate, 0.0003 Gm. ($\frac{1}{320}$ grain). 1 Cc. ampoules.
14. **Morphine and Hyoscine**: Morphine Hydrobromide, 0.01 Gm. ($\frac{1}{8}$ grain); Hyoscine Hydrobromide, true, 0.0004 Gm. ($\frac{1}{250}$ grain). 1 Cc. ampoules.
15. **Pilocarpine Nitrate**, 0.02 Gm. ($\frac{1}{5}$ grain). 1 Cc. ampoules.
16. **Pituitrin**. 1 Cc. ampoules.
17. **Quinine and Urea Hydrochloride**, 1%. 5 Cc. ampoules.
18. **Quinine Dihydrochloride**, 0.25 Gm. ($3\frac{1}{2}$ grains). 1 Cc. ampoules.
20. **Sodium Cacodylate**, 3-4 Grain. 1 Cc. ampoules.
21. **Sodium Cacodylate**, 2 Grains. 1 Cc. ampoules.
22. **Sodium Cacodylate**, 3 Grains. 1 Cc. ampoules.
23. **Sodium Cacodylate**, 7 Grains. $1\frac{1}{2}$ Cc. ampoules.
24. **Strophanthone, Dilute**: Strophanthone, 8 minims, diluted to 1 Cc. by normal saline solution. 1 Cc. ampoules.

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THE JOURNAL

OF THE

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Published under direction of the Council of the Maine Medical Association

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Proof-sheets will be sent to the author when requested to do so.

Communicate with the printer early regarding reprints, as the best rates can be had during time that the paper is on the press for the Journal.

The Journal assumes no responsibility for opinions expressed by the authors.

VOL. II.

FEBRUARY, 1912.

No. 7

THE IMPORTANCE OF AN EARLY DIAGNOSIS AND TREATMENT OF UTERINE CANCER.

By E. V. CALL, M. D., LEWISTON, ME.

(Read before the 50th Annual Session of the Association at Augusta, June, 1911.)

The paper which I shall read to you today is but a key-note to a general movement which is being made all over the country for the prevention and cure of cancer.

In the past fifteen or twenty years, the medical profession has made wonderful progress in the prevention and cure of disease, especially in appendicitis and tuberculosis. In appendicitis we are saving thousands of lives yearly, simply because the medical profession know they have a curable disease if the diagnosis is made early and the proper treatment used. I can remember when we frequently lost cases of appendicitis simply because they were not diagnosed early, peritonitis had started, medical treatment was tried, operation delayed. Rarely do we lose a case now. The diagnosis is made early. The physician calls the surgeon sooner. The laity are educated to the fact that severe pain in the bowels or right side means trouble and they consult their doctor at once.

In tuberculosis we are saving thousands of lives yearly because the medical profession know they have a curable disease if the diagnosis is made early. The laity know that tuberculosis is a curable disease if taken early and if they have trouble in this direction, consult their physicians at once.

I shall attempt to show that in uterine cancer we have a curable disease if the diagnosis is made early and proper treatment used, that the medical profession at large does not recognize this fact, that the laity and women in particular do not know it, and because of these facts we are losing thousands of lives every year which can be saved.

I shall present my paper by showing

1. The great prevalence of cancer and that it is on the increase.
2. Some of the causes of cancer as far as we know.
3. The great importance of an early diagnosis.
4. Some of the reasons why an early diagnosis is not made.
5. Treatment.

First, to show the great prevalence of cancer and that it is on the increase, I took a period of five years in the States of Massachusetts and Maine, the years 1905 - 1910 in Massachusetts and 1903 to 1908 in Maine.

In Massachusetts, in the year 1905, there were three hundred and twenty-eight deaths from cancer of the female genitals; in 1906, two hundred and ninety-seven deaths; in 1907, three hundred and nineteen deaths; in 1908, three hundred and ninety deaths; in 1909, four hundred and two deaths, making an average yearly increase from the first year to the last of forty-eight (48) deaths.

In the State of Maine, I took the years 1903 - 1908, as I was unable to get the last report. We are losing about one hundred and fifty women every year at present, with a yearly increase of about seventeen deaths.

If we took an average increase of all deaths from uterine cancer in all the States and multiplied it by the number of States in the Union, and that by ten for ten years to come, we could see the large number of women we are losing and the great numbers we are going to lose in the United States in the next ten or twenty years.

More women die of cancer of the uterus than of cancer of any other part of the body. This is shown in the sixty-eighth Annual Report of the Registrar-General of Births, Deaths and Marriages in England and Wales, 1907, when the statistics of deaths in the years 1901 - 1905 are as follows:—nineteen thousand, six hundred and forty-five women died from cancer of the uterus. Next to this, fourteen thousand, three hundred and eight died from cancer of the breast, twelve thousand, forty-eight from cancer of the stomach. The highest mortality occurred between the ages of forty-five and fifty-five. We have then in cancer of the uterus a disease which carries off annually, in England and Wales, nearly four thousand adult females, the great majority of them mothers, usually mothers of large families, and at a time of life when most needed.

CAUSE — A great factor in cancer today is centered in the search for the cause. Scientific research and bacteriology have done so much in finding the cause of disease and thus giving us a direct line of treatment in so many maladies, that we grasp at their every effort and await results with utmost interest. In cancer, they have not succeeded. The possibility of its existence being due to a parasite, is supported by the published reports of many instances, in which many dwellings or rooms seem to have had the unfortunate property of imparting the disease to its occupants very similarly to scarlet fever and tuberculosis.

Well-equipped and endowed laboratories have been established for the purpose of studying cancer, but thus far their labors have been unrewarded. Though Gaylord and Clowes have found that a tumor may be transferred from one mouse to another and its growth continued, and further, that the tumor can be propagated through several animals in this manner. Continued irritation of the epitheal tissue or vulnerability of parts seems to act as a strong causative agent.

This feature is demonstrated in the almost constant invariability of its occurring in the uterus that has been rendered vulnerable by traumatism, lacerated cervix and inflammation. The women of India who wear metals dangling about different parts of the body, are very liable to cancer in these parts.

On the other hand, the breast is next to the uterus as a seat of cancer and here we do not get vulnerability, traumatism or continued irritation of the parts. Age has an unquestioned influence on the occurrence of cancer of the uterus. Heredity is an influential cause.

A. Laphorne Smith has published a very interesting paper entitled "Is Cancer Contagious?" After presenting statistics to show a wonderful increase in the frequency of cancer, he offers many instances to show that cancer is conveyed from one person to another by means of a parasite called *cancriameba macroglossa*. He claims that cancer has increased all over the world 30% in one decade. He cites three instances of the disease conveyed from the genital organs of women to those of men. Sherrill reports a collection of forty-three cases of this kind. Many are the reported cases of direct transference of cancer in an individual from lip to lip, tongue to gums, cervix to lower part of vagina. Behla cites many instances of surgeons becoming infected by cancer in operation. Beard and Conheim have together worked out the theory of neoplasms. In all my readings on the subject of cause, however obscure, the chief cause seems to be the continued irritation of the epithelial tissue.

Second. The great importance of an early diagnosis.

All experienced operators claim that if the disease can be removed entirely before it has invaded surrounding tissue or glands, the woman can be saved. In other words, if we can make an early diagnosis of our cases and have them operated upon, we can save thousands of women yearly. This fact alone makes it most important that an early diagnosis be made.

Some of the reasons why we are unable to make an early diagnosis are first,—ignorance on the part of the patient who considers a bloody vaginal discharge of no consequence, or through dread of an examination delays in consulting a physician until after the growth has extended beyond operative treatment. In addition, many believe that if it should be cancer they cannot be cured and prefer to remain ignorant of their true condition. Many physicians believe that cancer of the uterus is incurable and through them the laity have a similar belief. This is shown to be true by the four hundred and twelve patients admitted to the Johns Hopkins Hospital, during a recent period of years, of which number only 61% were operable.

Another reason why an early diagnosis is not made is the failure of physicians to examine patients who come to them complaining of a bloody discharge or with symptoms referable to a diseased uterus and the inability of many physicians to recognize cancer of the cervix when it should be recognized, and they continue to treat a so-called ulcerated condition of the cervix by astringents and curetting until the only time for a successful removal is passed. Malpractice on the part of irregular or quack physicians who knowingly treat such cases locally for daily or weekly fee until the patient goes from an operable to an inoperable condition. I had a case not long ago when I made a diagnosis of cancer of the uterus and advised operation. The patient fell into the hands of one of these irregular physicians who treated her for just nine months by X-Ray, telling her all the time that she was doing nicely and improving. Finally she began to have hemorrhages, then more hemorrhage, later she and her husband came to me and begged operation. I felt that it was too late, but operated and the patient is doing her own work, it being seven months ago. I hope she will live two years but I feel sure had the operation been performed when I first made the diagnosis, it may never have returned. I hope it won't now.

Another reason why an early diagnosis is not made. The condition coming on insiduously sometimes gives rise to no symptoms until they have extended beyond operative relief. Fortunately, we are told, such cases form a very small percentage of all the cases and in nearly all where bleeding is either absent or of short duration there are other symptoms present which should lead to a diagnosis

long before, provided the women are educated to these forewarnings of danger.

The remedy of the above lies in the earlier recognition by the medical profession and through the physicians the women of the country should be made to realize that any unnatural vaginal discharge or other manifestations of local trouble may be indicative of some slight disorder which can be easily remedied or may be the first symptom of a cancerous growth which, if recognized in time, may be cured.

TREATMENT—All experienced operators are agreed that since it is at first essentially a local disease and therefore eradicable, and subsequently involves structures that cannot be removed, attempts at removal must be made early. It must be attacked while it is still confined to the uterus if eradication would be reasonably expected. Such being the case, early diagnosis is of necessity an essential to early attempt at removal by whatever means adopted.

This essential is the chief obstacle to early treatment. Unfortunately, in this relation, the uterus is an organ concealed from view. In addition, many women from a sense of modesty or from a belief that women customarily have some uterine affection, neglect themselves and fail to seek relief.

Another obstacle is the deep-rooted misconception that is held by the laity, and by the careless, irregular doctor, that the menopause is characterized by irregular uterine hemorrhages or menorrhagia and leucorrhea. Constant and industrious effort will be necessary for many years to remove those barriers to early diagnosis and early treatment of uterine cancer. Before early diagnosis and treatment will be feasible, women and physicians must be educated to the plan of women being frequently examined during the cancer period of life by their physician. They should submit regularly to such examinations as they do to having the dentist examine their teeth.

It would seem well to tell women such examinations are desirable as dire results frequently come from neglect of such practice. I saw a case which recently came into the hospital, where the woman had never been examined by or consulted a doctor though the disease was so far advanced that we would not operate. All who have hospital experience or service see cases of this kind. We have no difficulty in allaying fears of pregnant women when we insist on their furnishing specimens of urine and if necessary, examination, telling them it is a means of precaution. We may give the same reason as uterus, and goes on to say "The disease progresses to a fatal termination under its treatment." As to radium, I will quote from Butcher, who states that while he is enthusiastic in its advocacy for superficial growth, for uterine cancer it is inert. Gillhorn, in 1907, came out with

the acetone treatment which he advanced and urged the medical profession to try for the cure of uterine cancer, but now he advocates its use for non-operative cases only.

The opsonic treatment has not produced anything for the cure of cancer as yet, but along this line Bashford and Murray have found that a few drops of blood from a normal mouse injected into the circulation of a mouse to be subjected to the cancer-grafting, prevents the graft from being successful, though blood from another species, a precaution against cancer.

From a critical survey of extensive references at home and abroad, on the subject of cancer of the uterus, at the present day, the following may be said:

First—We must educate the women and the physicians of the country to the necessity of adopting means of arriving at the earliest diagnosis possible and that followed by prompt and radical operation, the only treatment which offers anything sure at the present day.

Many medical remedies have been tried. Trypsin has not proven itself superior to the radical operation and valuable time should not be lost by trying it on operable cases.

The report of the cancer commission, in 1907, states: "The X-Ray has not proved of value in cancer of the animal, has no effect on it."

A trial of seven months by the Cancer Commission of Harvard University of the treatment of cancer in general with the body fluids and cancerous ascitic fluid has just been published. It had no effect on mice. While in some cases it lessened pain and prolonged life one to six months, it did not permanently benefit the patient and in mouth and jaw cases it hastened the process.

Just a word must be said concerning the inoperable cases. I will quote figures to show that the introduction of the radical abdominal operation for cancer of the uterus has greatly reduced the number of inoperative cases. Thus J. H. Jacobson of Toledo, Ohio, shows that simultaneously with the adoption of the radical abdominal operation many operators' records are increased in the operability of all patients presenting themselves for examination. Thus Baisch states that at Tuebingen, the operability of all cases of cancer of the uterus rose from 48.3% to 68.6%, with the introduction of the radical abdominal operation. While Muller of Berne raised his operability from 33% to 89%, Doderlein from 48.3% to 68%, Franz from 29.2% to 52%, Kueston from 34.5% to 68.7%, Twifel from 66.8% and Polosson equal results.

This is a very recent tabulation of figures and shows that the abdominal route gives our patients a greater chance for operation and possibly cure.

No signal advance has been made of late years in the treatment of these inoperable cases, and the explanation lies in part in the difficulties experienced in their management.

Few hospitals will hold them for treatment. The curette and cautery are still of the best use in these inoperable cases.

As yet no remedy has met the desired object, that of destroying the invading cancer cells. We look to the chemist and biologist for the solution of the problem, believing that a vaccine will soon be found that will more than palliate the disease, a vaccine that will prevent cancer from occurring or at least cure it after it has been diagnosed and prevent recurrence.

After we find a remedy or vaccine claimed to do all this it will be years before we can safely use it in operable cases, lest we fall victims, as many have done, in the use of the X-Ray for this disease when the patient has gone through three months of X-Ray treatment from a condition of operability to absolute hopelessness.

THE ADMINISTRATION OF GENERAL ANAESTHESIA, WITH SPECIAL REFERENCE TO THE OPEN METHOD.

BY W. G. CHAMBERLIN, M. D., FORT FAIRFIELD.

(Read at Annual Meeting Aroostook County Medical Society,
Houlton, June 3, 1911.)

On looking up a list of supplies preparatory to the administration of an anaesthetic, we find that besides the apparatus necessary for the actual administration of the anaesthetic, the anesthetist should be provided with the following; a mouth gag, a wedge to force the jaws apart, tongue forceps, hypodermic syringe, strychnine, mouth wipes, and a pus basin. A cylinder of oxygen, an infusion set and a tracheotomy tube. Then the apparatus for the anesthetic means a tank of nitrous oxide gas with a complicated inhaler, through which nitrous oxide, chloroform and ether may be administered, and the use of which requires special training. In our work in general country practice, we are not so equipped. We have tongue forceps, a hypodermic syringe, and wire masks covered with gauze, and with this meagre outfit we succeed fairly well.

It is quite necessary to see that the patient has no food for at least three hours, as a full stomach impedes narcosis and excites vomiting, and vomiting during partial narcosis may cause trouble through solids being inhaled. On the other hand, an anesthetic should

not be administered after a long fast. If the patient cannot retain nourishment by the stomach for several days before the operation, a nutrient enema of beef and brandy or salt solution should be given half an hour before the patient goes on the table.

The best hours for operating are about 8 A. M. or 2 P. M., as these are the periods of greatest vital activity. A purgative should be given the patient, two nights before operating and an enema on the morning of the operation. The diet for the day before operation should be light and easily digested. A powerful purgative given the night before often upsets the digestion and increases the after sickness.

I think that one of the greatest aids to giving an anesthetic, is to have the confidence of the patient. You will have more trouble with those with whom you are not well acquainted and with those with whom you cannot reason. Children you can entertain with something imaginary until they succumb to your drug.

I always prefer, where it is possible, to have the patient on the operating table at the start, as very often the lifting to the table excites vomiting. The room should be very quiet and no talking except that which is done by the anesthetist to the patient, this should be of a reassuring character, simple directions about breathing, etc. Conversation by others may be misconstrued by the patient and cause considerable bother. We should avoid giving chloroform in a closed room, lighted with lamps, as some of us have done in obstetric practice, because the chloroform becomes decomposed, acid fumes being generated, which are not only very irritating to the nose and throat but very deleterious to the patient.

Our choice of anaesthetic is almost as limited as our apparatus. While we would like to have nitrous oxide to start with and oxygen to work in between, such means are not at hand, so it has been our custom, in ordinary cases, to start with chloroform or anesthol and after the stage of excitement is past give ether. By this method, we avoid the struggling we used to have, when giving ether from the start. We used to pour a large amount of ether on to two or three towels and jam them down over the patient's face. This, of course, strangled him and it often required several attendants to hold him down. By beginning with chloroform and then giving ether this can be obviated, greatly to the advantage of the patient and all concerned.

This open method needs no special description as the name itself will suggest to you the method. I have always used this method with chloroform, and of late with both chloroform and ether. I never have used a closed inhaler but used to give ether by the semi-open method on a number of thick towels. The inhaler used is either an Esmarch or Schimmelbusch. The latter is preferred on account of

being heavier. Cover the wire frame with from two to four layers of gauze, just enough to hold the drops, while they evaporate. If the gauze is too thick, the anaesthetic evaporates on the outside and the patient is inhaling carbon dioxide; if it is too thin, the drops will spatter through on the face. In some individuals, like alcoholics, you will need to cover the mask a little thicker for a few minutes, until the proper stage of narcosis is reached. It then may be removed. This is easily done by covering the mask with a small towel for a few inhalations.

In starting with chloroform, hold the mask a short distance from the face, letting the drops fall very slowly at first until the fear of suffocation is passed reassuring the patient all the time, that everything will be all right. Gradually lower the mask, and increase the frequency of the drops. During the stage of excitement, drop quite rapidly as long as breathing is regular and unimpeded. But now, as throughout, interference with the breathing must be met by withdrawal of the anaesthetic until breathing is again normal.

The excitement passes soon and a slight muscular rigidity may persist for a short time, although lid reflex, fixation of the eye ball with contracted pupils, evidence the passage into the third degree, or true anaesthetic stage. While this is sufficient for any short operation, such as the setting of a limb, extraction of teeth, etc., if the operation requires more time and the patient can take ether, we simply substitute ether for chloroform and give drop by drop in the same manner as we did the chloroform.

As it is very necessary that both ether and chloroform should be fresh, I prefer the small packages, which can be opened fresh for each case. Get chloroform in quarter pound bottles, make a small groove on each side of the cork, and you have a drop bottle as good as any on the market. If you use the quarter pound cans of ether, make two small holes in the metal cap with a darning needle, and you have a drop can for your ether.

I have used anesthol in a few cases in place of chloroform. I can not see any advantage in it over chloroform. It has always seemed slower and causes such profuse perspiration that I like to keep it afar off. It may be that I do not know how to use it—I would like to see it used by someone who is accustomed to it, for it is believed to be more safe and pleasant for the patient. I have used it in the same manner as the other anaesthetic, but I think the mask should be partly enclosed in oil silk or rubber tissue with a hole on top through which the drops may fall.

In point of safety, mixtures occupy a place between chloroform and ether, the added safety over chloroform depending mainly upon the stimulating effects of the ether.

The complications and dangers that arise when mixtures are used are from chloroform, and they should be given with as much caution as would be observed in the administration of the most dangerous drug they contain.

The variation of the pupils during ether narcosis is an unsafe guide. They are not uniformly influenced by it as in the case of chloroform and so have no common ground of comparison. When full anaesthesia is reached, the pupils react more slowly and will remain fairly constant, tending to dilate when the anaesthetic is pushed. Wide dilatation and very slow reaction is evidence of excessive doses, as a rule, but there are exceptions. More can be learned from the breathing than from the eye reflexes, as to when to begin to operate. Good, long, full respiration with a tendency to snore if the jaw is not held up, tell us more than we can learn from the eye. In all cases during an operation it must be remembered that the dilatation of the pupils, variations in the respiration and circulation may be reflex and must not be mistaken for ether effects.

No doubt all of us have noticed that sometimes during an abdominal or pelvic operation the patient would begin to breathe very hard, and we, thinking that narcosis was too light, would force the anaesthetic, only to find all at once, that narcosis was too profound. This is explained very clearly in an article in a recent *Journal of American Medical Association* by Isabella C. Herb of Rush. She says, "Manipulation about the diaphragm causes noisy expiration, while manipulation about the pelvis, sigmoid, rectum and anus causes prolonged inspiration. Perhaps no reflex action causes the surgeon so much annoyance as the almost explosive expiration caused by manipulation of the intestine, in an effort to replace it in the abdominal cavity. Surgeons usually attribute the difficulty to imperfect narcosis, but if they will cease manipulation for a few moments until the reflex action disappears, they will experience no trouble in returning the bowel through the incision." And we may here note that it is this action on the sympathetic nerve that enables us to revive patients from syncope by dilatation of the rectum.

In giving an anaesthetic to children, I have often succeeded very well by getting them interested in the sights they can see if they will only smell the chloroform mask for a few minutes. They will become interested, forget their kicking and will soon begin to smile. Whether or not they are actually seeing what was described to them we cannot know. We do know that if we catch them this way rather than by "main strength" (the way the Irishman played the violin) there is much less danger, both from immediate and after effects.

After the child is anaesthetized, ether may be used, if the operation is prolonged, but care must be taken to give it lightly as children readily yield to its influence and it requires little to maintain anaesthesia.

Ether is apt to produce much bronchial irritation in children and, if used at all, should be given by the open method. The same is true very often with those over sixty: the cough and secretion of mucus interferes with narcosis and they become cyanotic. Their arteries and kidneys are also frequently diseased and so may be injuriously affected by ether. Very often in these cases the cough and cyanosis may be relieved by a few inhalations of chloroform and when breathing quietly and regularly ether may be again resumed.

In some cases we administer morphine hypodermically half an hour before operation, but it should not be a routine practice. In highly excitable, vigorous, alcoholic individuals it is of distinct advantage. When it is used it is necessary to maintain lighter anaesthesia than without it. Its chief objection is that it depresses respiration, and by its action on the pupils may mask some of the symptoms of over-narcosis. Any difficulty with respiration or drug idiosyncrasy is contra indication for its use. It should not be given to very weak subjects or to those in stupor.

Albert S. Morrow (New York Polyclinic) says, "It should be the aim of the anaesthetist to keep the patient in about the following conditions:—regular and fairly deep respiration, with only slight snore; pupils moderately contracted and sluggishly sensitive to light; conjunctival reflex just abolished; full muscular relaxation; and a good color without blueness to the lips or cheeks."

To this we may add that one eye should be kept on the field of operation, for it is here that we can tell much about the circulation by the color of the blood.

(Reprint from *The Woman's Medical Journal*, Aug., 1911.)

Storm Binder — The Favorite of the Medical Profession.

We note with much pleasure the wonderful growth of the Storm Binder in the favor of the medical profession. From a comparatively small beginning but a few years ago the business has grown into a large and profitable one. Dr. Katherine L. Storm, the inventor and head of the concern, is to be congratulated on this success, which has been won through the worth of her binder and her fair dealing. Dr. Storm not only has the satisfaction of having built up a paying business, but she also has the greater satisfaction of having scores of grateful patients to whom her name is a synonym for relief and comfort. The testimony of the numbers whom she has helped in various conditions through the efficacy of her excellent binder and supporter means more to Dr. Storm than any other phase of her success. Probably no other binder on the market has to so great a degree the favor and confidence of the medical profession. The Journal rather especially rejoices in the success of this woman physician.

MAINE MEDICAL ASSOCIATION.

TRANSACTIONS

SESSION 1911, HOUSE OF DELEGATES, AUGUSTA, JUNE 28, 1911.

Meeting called to order by the President, Dr. E. H. Bennet, at 9 A. M.

The Secretary presented a petition from the Somerset County Medical Society for a charter, the society having organized with twenty-three members, and complied with the requirements. On motion of Dr. Crane, the Society was granted a charter.

The Secretary called attention to the time of holding the first regular meeting of the House of Delegates, and after thorough discussion by Drs. Swasey, Bowers, Wakefield, Peters and Bartlett, it was voted that Section I of Chapter IV of the By-laws be amended to read "The House of Delegates shall meet at 9 A. M. on the first day of the annual session, etc.," in place of at 2 P. M. on the day preceding the annual session, and that Section I of Chapter VII of the by-laws be amended to read "The Council shall meet daily during the session, etc.," rather than on the day preceding the annual session.

Amendments laid on the table for a day.

Dr. Peters moved that the fixing of the time and place of the next annual meeting go over until tomorrow. So voted.

Dr. Moulton presented a suggestion of Dr. Jackson that the ex-presidents of the association be made members *ex officio* of the House of Delegates. The idea being that during their term of office they would become familiar with the needs of the association and would be valuable members of the house. He stated that at the present time, there are eighteen living ex-presidents, ranging from Dr. J. M. Bates in '75, to Dr. Galen M. Woodcock in 1910. The House of Delegates this year consists of thirty-five members. Dr. Peters thought that although the plan had some merit, the fundamental idea of the House of Delegates was a per capita representation, one delegate for every twenty-five members, and that this arrangement would utterly destroy this balance in a short time. After discussion by Drs. Crane, Bennet, Moulton, Peters, Jackson, Bowers, Swasey and Dobson, it was voted that the matter be laid on the table until tomorrow.

Dr. George B. Swasey reported as Councillor for the First District as follows:—

Report of Councilor of the First District.

It is with satisfaction that I present my report of the Cumberland County Society for the year 1910-11.

At the last annual meeting, Dr. Addison S. Thayer was elected President and under his earnest and able direction the Society has become strong and the meetings have been well attended. The present membership is one hundred and twenty-nine, a gain of fifty over last year.

Prominent men from away have presented papers before the Society. The present membership of the York County Society is forty, a falling off of twelve from last year. This present reduction in membership is due to a failure in prompt payment of dues and it is very much hoped that those physicians will soon be returned to membership. It was my privilege to be present at their annual meeting last January. At that time, the matter of holding meetings in different parts of the county was discussed and it was referred to the incoming officers with power. The April meeting was held at Sanford and the present June meeting at York Beach. As the physicians of this county are located at considerable distances from any one center for holding the meetings, it is hoped that the custom of varying the place of meeting will encourage an increase in membership. I was invited to the meeting at York Beach on January 22, and it would have afforded me much pleasure to be present but I was unable to do so.

Respectfully submitted,

GEO. B. SWASEY, M. D.,

Councilor for First District.

On November 15th, I visited the Penobscot County Medical Society at Bangor. After transacting the regular business, electing officers, etc., the society adjourned to the banquet hall where we found every provision for a sumptuous repast. After dinner the President, Dr. J. A. Lethieco delivered the annual address, this being the annual meeting. The President gave in his admirable address, a review of the year's work, which would reflect great credit on any medical society.

The plan adopted by this society is to have one paper, the author of which is often a non-resident; some leading man in the profession. In this way, during the year, some valuable lessons are taught and much good must result. In addition they always have a banquet, which seems to be a drawing card, and judging from what I saw and heard, I hardly see how any physician could stay away unless it was utterly impossible to be present. There were thirty-four in attendance at the annual meeting, which was a very pleasant, interesting and instructive gathering.

January 3d, '11, I visited the Androscoggin County Society at Lewiston. The evening was spent in discussing legislation. A strong co-operative spirit manifested. The society gave evidence of doing good work.

January 4th, '11, I spent a delightful day with the York County Medical Society. The work was of a high order, and a general good feeling seemed to prevail. Dr. Swasey, Councilor for the First District, also attended this meeting. This society should have a larger number of members. More enthusiasm on the part of the individual members will no doubt bring good returns. Have

not been able to attend the Cumberland County Medical Society, but did attend a meeting of the Portland Medical Club on the evening of Jan. 4th, '11. The work done in this Club is sufficient proof that Cumberland County is well able to walk alone.

On March 21st, I visited Franklin County Medical Society at Farmington. Was much pleased with the work done at this meeting. The papers were good and well discussed. The members of this society are widely scattered, still the attendance was good and every one seemed interested.

On March 22d, I visited the Sagadahoc County Society at Bath. The members of this society are wide awake, and I saw no reason for supposing the society was in any other than a healthy condition. At this meeting Dr. Twitchell was essayist and read a very instructive paper on Surgery, which was well discussed. March 23d, I met the members of Kennebec County Society at Augusta. This was an excellent meeting; attendance good; interest marked; discussion free and papers first-class. On June 7th, I attended the Aroostook County Society. Aroostook is a great county and their society in good working order. The members can talk medicine and eat lobster at the same time. The papers read at this meeting were good, well prepared, thoughtful and instructive. The discussion was not as free as I believe it ought to have been. These men travel farther to attend their county meeting than the Rhode Island men do to attend their State meeting. They should be complimented. Washington County has held the usual number of meetings, all of which have been well attended. Dr. Wakefield, Councilor for Fifth District, attended the May meeting at Eastport, and added materially to the interest. This society is in a healthy condition, and we hope to do better work each year.

SUGGESTION — If the plan of having the President visit the County societies be continued, I think some changes should be made. I would take two weeks to make these visits. This is considerable time. I believe it would be better to add the First Vice President and some other members to the force and form the three into an organization committee. This would divide the work and I think increase the value. When these visits are made, I think some member of the society visited should read a paper on the particular needs of that society, setting forth all weak points, changes desired, and outlines for future work. This would form a nucleus for general discussion which ought to be helpful. I do not believe any of the societies are as well organized as they should be and some systematic plan should be instituted and followed. We need more enthusiasm, greater efforts to bring men in and hold them afterwards. Perhaps more than all we need a stronger co-operative spirit, the breaking down of personal barriers, which on investigation in many cases will prove very flimsy. I regret that I could not visit all the counties, but being located in one corner of the State, made the work more difficult.

Dr. H. L. Bartlett of Norway reported as Councilor for the Second District as follows:—

Mr. President and Members of the House of Delegates—

As your Councilor for the 2nd District, it gives me pleasure to report that the societies in this jurisdiction which includes Oxford, Franklin and Androscoggin Counties are in good condition so far as I am able to determine.

I have attended all the meetings of the Oxford County Medical Society during the past year. The meetings are well attended, papers good and all are well and thoroughly discussed.

Practically all the members are very much interested in the work. One thing I believe that has materially helped keep this society in such healthy condition is that of setting apart one meeting a year (the June meeting) as "Ladies' Night." At this meeting no formal work is taken up, but some man, a leader in the profession outside the county or State, has been invited to give an address on some topic that would interest the mixed audience; this followed by a banquet and general good time. I am of the opinion that all the societies in the State would find this arrangement helpful to them.

I am especially proud of the Franklin County Society, which I assisted in organizing a little over two years ago. Through correspondence with some of the physicians of this county, a meeting was called at Farmington in March, 1909, at which I, accompanied by Dr. William P. Hutchins, then of Rumford but now of Portland, was present. We met a majority of the representative men of the county and all seemed very anxious to complete an organization and get to work. Dr. Hutchins very ably assisting me, we soon had them on a good basis for future usefulness, and the report I have just received from the Secretary shows me that in the good work they have done, they have exceeded my expectations.

In the county there are twenty-three regular physicians, eighteen being members of the society.

The meetings are held four times a year, average attendance eight. In a county of such "magnificent distances" and the physicians so widely scattered, I believe the profession in Franklin county ought to be congratulated on such good showing.

That the society at time of organization made no mistake in its choice of Secretary, Dr. Geo. L. Pratt, and has made none since, is very evident. Without a competent and interested secretary, no society can flourish long.

During the past year I have been unable to visit the Androscoggin County Society, but from my knowledge of the men who compose it, and from conversation with these men, I feel safe in reporting the society in good condition.

Respectfully yours,

H. L. BARTLETT.

Dr. George H. Coombs of Waldoboro, reported as Councilor for the third district:

In the Third Councilor District, small but flourishing societies exist in Knox and Sagadahoc Counties.

In Lincoln County no society has been formed.

It is urged that all physicians of Lincoln County affiliate with the county society nearest or most convenient for them.

Very respectfully,

G. H. COOMBS.

Dr. Coombs also stated that owing to the geographical conditions and inconvenience of travel in Lincoln County that of the fourteen eligible physicians, very few could be induced to join a county society at the present time.

Dr. R. W. Wakefield of Bar Harbor, read his report as Councilor for the Fifth District.

Mr. President, Councilors and Delegates—

I beg to submit the following report for the Fifth District:—

WASHINGTON COUNTY.

The Washington County Medical Society held three meetings during the year. All the meetings were well attended and the literary exercises of the highest order. It was my pleasure and privilege to attend the session at Eastport, in May. The Washington County men certainly can not be beaten for cordiality and hospitality and I never enjoyed a medical meeting more.

I was especially impressed with the number of interesting clinical cases reported and the very earnest discussion which followed. This reporting of cases with the free interchange of views concerning the same is, to my mind, the most helpful work a medical society can do.

The society has gained six new members during the year, has successfully adjusted its difficulty with its former secretary and, if I am any judge of a Medical Society, is in a flourishing condition and doing excellent work.

HANCOCK COUNTY.

The Hancock County Medical Society held seven successful meetings during the year and it was my privilege to attend all but one.

Although the physicians in the county are widely scattered, yet, to my mind, the attendance on these meetings was not what it should be. It will be our aim, during the coming year to increase the attendance; and we hope to accomplish this by holding meetings less often and securing more attractive programmes.

Two amendments to the by-laws are now pending: The first is to hold meetings quarterly instead of monthly and the second is to elect a programme committee of one at each annual election.

The Society has lost two members during the year by removal from the State. No new members have been added.

This report sounds a bit pessimistic for Hancock, and it cannot be gainsaid, the Society is passing through a critical stage of its existence. Like other counties, Hancock has a few positive members and a few negative members, but the majority are simply passive.

If these passive individuals can be aroused from their lethargy and induced to "put their shoulders to the wheel" and help the work along, I will be able to make a more optimistic report next year.

R. W. WAKEFIELD.

Dr. R. H. Marsh of Guilford, read his report as Councilor for the Sixth District:—

Mr. President and Members of the Maine Medical Association:

As Councilor for the Sixth District, I herewith submit the following report:

The Aroostook County Medical Society holds but two meetings each year, and it was my intention to visit the society at its annual meeting at Houlton, in June; but on account of unavoidable illness at home, I was obliged to forego the pleasure. By some correspondence, however, I am satisfied that Aroostook County Society is in good working condition, and that it has done a vast amount of good in uniting and knitting more closely together, the members of the profession in its locality. I understand that their meetings have

been well attended, and this fact alone,—considering their infrequency,—convinces me that a great deal of good must have resulted therefrom.

The Piscataquis County Medical Society, although small in membership, holds its meetings regularly and with good attendance. One of the most encouraging features of the organization is the great interest taken by the younger members, which always insures a meeting of enthusiasm and creates a spirit of good fellowship that will doubtless continue for many years to come. The Society has been the means of bringing the members of the profession into closer contact with one another, and of inspiring mutual trust and confidence. Many valuable and interesting papers have been presented by members of the profession from outside the county, in addition to those given by local men. I consider the Society in a flourishing condition.

The Penobscot County Medical Society is one of the oldest in the State, as well as one of the largest; and, having lived in that county for many years, and knowing, as I do, so many of the older physicians, it is an especial pleasure to me to visit the society, and it is a source of great satisfaction to report its good work, and usual flourishing condition. The meetings of the Society are usually held in Bangor, and upon every occasion that I have had the pleasure of being present there has been a large attendance. The prevailing spirit of cordiality, friendly interest and generosity is commingled with a desire to present, at these meetings, papers and discussions upon such subjects as will be profitable to the profession. The Society has been most fortunate in securing for speakers men eminent in medicine and surgery in our adjoining States, as well as in our own, and it is to be commended on its excellent condition.

R. H. MARSH.

The Secretary called attention to the fact that the condition of the Association was better than it had been in many years notwithstanding that the actual number of paid up members was less than three years ago. The present list of members was actually active in the sense that all were paid up, whereas formerly a large number were being carried along as dead wood. This was well shown in the annual receipts which had increased from about \$800 in 1906 to nearly \$2,000 this year under the reorganization plan.

The question of an amendment to the by-laws to cover the status of former members of the association who had not as yet joined a county society was discussed and it was shown that the present by-laws were rather ambiguous as to the manner in which these members could regain their membership after suspension for non-payment of dues. All new members are required to join the Association through a membership in some chartered county society, and it would seem that the same rule should apply to former members who had allowed their dues to lapse. The present arrangement made the keeping of accurate records almost impossible, and was confusing both to the officers and to the members. If a man for some reason could not join a county society and desired to continue his membership by paying direct to the State, he should be allowed to do so, but if he failed to

keep up his obligations, he should be placed on the same footing as a new member, i. e., should re-enter only through some county society.

On motion by Dr. Peters of Bangor, the President appointed as a committee to revise the by-laws, Dr. Peters, Dr. Wakefield and Dr. Moulton.

Adjourned.

AFTERNOON SESSION.

The committee on revision of the by-laws read their report and the same was laid on the table until tomorrow for discussion.

JUNE 29, 9 A. M.

Called to order by the President.

Dr. Gehring of Portland, presented his books as Treasurer to the Council, for audit. He stated that in the year 1907 dues collected were \$932; in 1908, \$934; then came the change, the plan submitted by the American Medical Association for reorganization, and that year we collected \$1,133; the next year, \$1,202; this last year, \$2,021.

Dr. Thompson of Bangor moved that the question of the revision of the by-laws be taken from the table and it was so voted.

Dr. Peters reported for the committee:

The committee appointed for this matter met yesterday noon and submitted the following amendment which was read yesterday at a meeting of the House of Delegates. The point in question is to make some sort of an arrangement by new by-law whereby the men who are now members of the Maine Medical Association who are not members of County Societies may remain members of the Maine Medical Association if they choose and yet not interfere with the proper bookkeeping at the headquarters of the Society, and so have a smoothly running organization so that we may know just where we stand, and yet not interfere with the feelings of a few men throughout the State who have always been members of the Maine Medical Association and who wish to retain this membership but who do not like to join a County Society.

The by-law as it now reads says that there are several classes of members: active members, members of component societies, members of this society who at its organization were not members of County Societies, men who shall become members of the County Societies, retired members and honorary members. The first proposition was to make a new by-law which simply made it obligatory on every man to join a County Society, otherwise he could not belong to the Maine Medical Association. We have formulated this new by-law which we think covers the ground perfectly.

To amend Sec. 2 of Chapter 1 of the by-laws of the Association, to take effect upon its adoption. Said by-law to be changed to read as follows:

"Sec. 2. Any active member of the Association whose dues are in arrears more than one year shall forfeit his membership in the Association and may

be reinstated only by becoming an active member of some component county society."

"Any member who is under sentence of suspension, or expulsion from, or whose name has been dropped from the roll of members of, this Association, or of a Component Society, shall not be entitled to any of the rights or benefits of this Association, nor shall he be permitted to take part in any of its proceedings until he has been relieved of such disability."

Now what effect does that have on this class of members that we are interested in? If there is a man who has always been a member of the Society and continues to pay his dues he continues to be a member of the Society in good standing, an active member; if he lapses his dues over a year he must then make application to some County Society, his own or the nearest one, in order to come in as any other new member. He can't find any fault with that. If he says "I have always been a member and I want to stay a member," we say "All right, if you had paid your dues you would have been. You haven't. Now it is up to you to get in the way you can." Dr. Moulton says that this simplifies perfectly their difficulties from the business side and seems to meet the situation all right.

On motion of Dr. Thompson of Bangor, the amendment was adopted.

On motion of Dr. Peters it was voted that the Secretary be instructed to notify this class of members of this action and also of the possibility of their becoming retired members on application; retired members having all the rights of active members except that of voting, and not having to pay dues.

On motion of Dr. Peters it was voted that the amendments changing the time of meeting of the House of Delegates and the Council proposed yesterday be passed.

The Treasurer was instructed to send bills to the members who have not joined a County Society as long as they retained their membership.

On motion of Dr. Dobson it was voted that the matter of making the living ex-presidents of the association *ex-officio* members of the House of Delegates be indefinitely postponed.

The time and place of holding the next annual meeting was discussed. Dr. Woodcock stated that there seemed to be a sentiment that the place should be Portland. Dr. Moulton extended the Association an invitation to hold its next meeting in Portland and on motion of Dr. Swasey it was so voted.

The date of the meeting was left to the President, Secretary and Treasurer to fix so that it would not conflict with the meeting of the American Medical Association, and still occur as late in June as possible.

On motion, Dr. G. H. Coombs of Waldoboro was re-elected as Councilor for the third district, including Sagadahoc, Knox and Lincoln counties, for three years.

On motion, Dr. G. R. Campbell of Augusta was re-elected as Councilor for the fourth district, comprising Somerset, Kennebec and Waldo counties.

Dr. Gehring presented his report as Treasurer as follows:—

On June 2, 1910, cash in the treasury, \$4,019.60. I closed the books this year on the first day of June. Income from various sources, \$1,613.24. Our expenses amounted to \$2,645.45. Balance in the treasury on June 1, \$2,987.39. But since the first of June, when these books were closed, I have received \$500 in dues.

The report was referred to the Council for auditing.

Dr. Gilbert presented his report as Managing Editor of the Journal as follows:—

In pursuance of action taken at the last meeting of the Association, the following members of the Committee on Journal, Library and Transactions met at Dr. Gilbert's office August 2, 1910, to take action on the question of a State Medical Journal, J. W. Bowers, W. Bean Moulton, F. Y. Gilbert and Addison S. Thayer who was delegated by Dr. Bennet to act in his behalf. The following physicians were present at the conference, by invitation, E. E. Holt, W. L. Cousins, T. J. Burrage, E. L. Gehring, Philip P. Thompson, C. R. Burr, H. E. Gribben, Rockland, and H. E. Milliken, Waterville.

After a general discussion of the cost, etc., of starting a Journal, the conference, by vote, endorsed the plan and the committee took the following action:

Voted:—That the transactions be published in Journal form under conditions laid down by the State Association, and the matters of arrangements be left with the Editorial Board, the following of whom were elected:

Editor-in-chief, Frank Y. Gilbert.

Associate Editors, C. R. Burr and Philip P. Thompson.

This Board was given power to make necessary arrangements regarding county editors, etc. Following the action of the meeting of the committee, notice of the same was sent to the absent members, and steps were taken towards completion of arrangements for the first issue to appear in December. The selection of county editors was left as far as possible with officials of the county association as we wanted an active member in each county to represent the Association on the Journal and to be responsible for the county news. This plan has proved satisfactory to a large extent but can be improved on.

A letter was sent to the American Medical Journal, asking advice in the matter of organizing and of running a journal. In response, we received a long letter from Dr. Green, Managing Editor, and the following is an extract: "We are very glad to know that you are making plans for a State Journal in Maine. There is no question but what it will be of great assistance to you in your organization work and in stimulating your society and increasing your membership. Practically, without exception the States which publish Journals of their own are the most active and progressive." Twenty-three States have Journals and eight use others. Among other things, Dr. Green advised writing some ten or more State editors. This was done and very satisfactory responses

received. The question of finance is quite an important one and the solution is in the securing of sufficient advertisements to support the Journal. A Journal is as important to a State Association as to a life insurance company or any corporation in that it affords an avenue for the dissemination of news, items, transactions of county societies, reports of interesting cases and the publication of papers prepared and read before these societies. We all know the work necessary to prepare a paper, but once read before a comparatively small body of men, it is of no further value. A State Journal not only offers him an opportunity to place whatever data he may have compiled before the profession of the State but will stimulate him to do his very best in its preparation. In other words, it will give him an added incentive to do good work, so that a State Journal becomes a necessary factor in the State association work. The ethical advertising, which must in part support it comes from the concerns dependent almost wholly on the medical profession for their existence, and it would seem but a small factor for them to contribute a quarter, half or full page to aid the profession of the State to carry on this work. If the members of this association would notify the supply houses whom they favor with their prescriptions, that until such a time as their advertisement appears in our State Journal, they will discontinue specifying that concern on their prescription, there can be no question as to the results. On the other hand, we should patronize those who give their support to the Journal. The first issue of the Journal contains advertisements of the following concerns:—Geo. C. Frye, Cook, Everett & Pennell, H. H. Hay Sons, Heseltine-Tuttle Co., of Portland, G. W. Carnrick, New York and Katherine L. Storm, M. D., Philadelphia, all of whom expressed an active interest in the work and were very glad to aid the medical profession in any way. Two large Portland concerns decline to co-operate with the Journal and can be judged accordingly. Look over the ads. each month and aid those who help us.

Beginning with the February issue, the matter of advertising was placed in the hands of the Maine advertising company, but this in no way lessens our responsibility in securing material enough to enable the Journal to live. At present there are twenty-three Journals owned by State associations and eight other States publish their transactions in State Journals operated apart from the association, so that thirty-one States have official organs for their transactions and papers showing the apparent need of some such publication.

Regarding second class mail rates, but little can be said other than it will be necessary to have a separate mailing list or cut out all advertising material. By some re-adjustment of our dues, the separate mailing list can be easily arranged.

Inasmuch as many questions of importance were arising regarding the management of the Journal and feeling the need of some advisory board, the Board of Managers were created, and a Treasurer, Secretary and Auditing Committee was appointed, so that the financial part of the Journal would be amply safeguarded.

This Board was made up largely of Portland members in order that meetings could readily be called, to take action on any measure arising, on short notice. Each year the newly elected President becomes a member of this and the oldest member from point of service retires.

The Constitution and By-laws provide that the Council shall supervise the publication of transactions, Journal, etc., of the association. It may be necessary to eliminate the board of managers or convert them into an Advisory

Board, leaving the active management in the hands of the Editorial Staff, under the direction of the Council.

The original plan of the Editorial Staff was an Editor-in-chief, with two Associate Editors in Portland and an Associate Editor or Collaborator in each county. The counties represented by the Secretaries have given the more complete reports on the whole, and this suggests the advisability of having the secretaries serve on the Editorial Staff. Some of the counties have voted to instruct the Secretary to send in a complete report of each meeting. The best results would be obtained from each county amending their by-laws so that the duty of the Secretary shall include the mailing of a copy of his reports to the Journal. This would assure the most satisfactory results.

We have had considerable trouble in obtaining a correct mailing list, owing to the confusion existing as the result of a two class membership. This will be greatly augmented by the adoption of the proposed amendment.

The Treasurer's report will show that all bills incurred in publishing the seven issues beginning with the December issue and including the June will be paid for with balance of \$11 on hand and some \$10 in outstanding bills.

We have printed all papers, transactions, etc., of the State Associations, together with fifteen county papers, county society proceedings, case reports, Journal and book reviews, etc.

In the seven issues, the Journal has given three hundred and thirty-nine pages of reading matter or an average of forty-eight and three-fourths pages per issue. This would mean five hundred and sixty-seven pages per year in place of the two hundred or so in the old transactions, at no additional cost.

The following books have been reviewed and are the property of the Journal, viz.:

Progressive Medicine, by Hare. Vol. I and II.

Modern Treatment. Vol. I and II.

Practitioners' Visiting Association.

Diseases of Nose, Throat and Ear. Balanger.

New and Non-official Remedies, by A. M. A.

Our exchange list includes all the State Journals. This is the report of our work for our first year and we now submit these facts to the Association, that you may take definite action as to whether you will continue the Journal. If you vote to continue, the following questions must be decided.

1. Shall we continue the present Board of Managers as an Advisory Board? This Board eventually to be made up of ex-Presidents.

2. Shall we vote to instruct the Councilors in each district to urge the county societies to amend their by-laws so that the Secretary's duties will include mailing complete reports of each meeting to the Journal.

3. Shall we vote that the Association go on record as favoring the plan of restricting their patronage to those concerns whose ads. appear in the Journal.

In conclusion, I want to express my appreciation and gratitude to the members of the Editorial Staff whose co-operation has made the running of a State Journal possible. Also the State Secretaries and the Board of Managers who have so readily co-operated with us to make the Journal a success.

FRANK Y. GILBERT, *Editor.*

The question of the finances of the Journal was discussed by Drs. Swasey, Campbell, Bowers, Wakefield and Gilbert. Dr. Gehring reported that the receipts for the past year amounted to \$830.87, \$700 of which comes from the Maine Medical Association treasury, the remainder from advertising. The expenditures amount to \$819.01, leaving a balance in the treasury on June 27, 1911 of \$11.86. Dr. Gilbert explained that when the outstanding advertising bills were collected that the balance in the treasury would be some \$90.

On motion of Dr. Wakefield, it was voted that the report referring to the publication of the Journal be accepted and the authorization of the continuance of the Journal be accepted.

DR. PETERS OF BANGOR:

I have a report here which I should like to read to the House of Delegates. The Managing Editors of the paper met and a committee was appointed to look up the various questions relating to the Journal and report to the House of Delegates.

I should like to add in connection with this, aside from the report, that the former cost of publishing the transactions simply as transactions and mailing to the members of the Society was probably in excess of \$800, so that we are now getting our transactions published in better form with the addition of the Journal, news and original papers for this additional expense, to say nothing of the library which we are going to have and the additions to the library which will come to it by virtue of the existence of the Journal. We therefore as a committee recommend as follows:

The report of the Managing Editor having been read and adopted and the Association having voted to continue the Journal, I will submit a report which embodies the suggestions of the editors of the Journal relative to the future management of the paper.

I. BUSINESS.

It seems evident to us that the Journal, if continued, should be issued twelve times a year.

The clerical work connected with editing the matter submitted for publication, attending to the correspondence connected with the same and attending to the advertising department is such as to make the employment of a permanent stenographer a necessity.

There should be a room which may be used as an editorial office.

Dr. Holt and others who own the library of the Maine Academy of Medicine have offered this library to the Association, provided we continue the Journal, provide a permanent home for the library and undertake to properly care for the same. At our request they have signified their willingness to allow the use of a room in the Infirmary (the same where the library now is) to be used as an editorial office and the home for the library. The rent of this room to be paid either in cash or by an equitable division of the services of the stenographer and librarian.

In order to carry out the above suggestions it will be necessary to increase the sum which the editors may draw from the Association treasurer from \$700 to \$1,100.

We therefore recommend that the House of Delegates vote to increase the appropriation as above stated and that they further authorize the editors of the Journal to carry out all the suggestions set forth above.

II. EDITORIAL.

It has not been difficult to get scientific material for the Journal, but the county notes which embody the doings of the component societies are not always forthcoming. The editors feel that this is a very important feature of the Journal, and, in view of this fact suggest the following changes in the editorial staff:

That the Editor and two Associates shall be appointed from the town in which the Journal is published. That other Associate Editors, not to exceed one in each county, shall be appointed by the Managing Editor. That the Secretaries of all the component societies shall be appointed as Assistant Editors, who shall be requested to make it their special business to forward a report of the doings of the county society to the office of the Journal.

W. C. PETERS, *Chairman*.

Dr. Swasey spoke of the difficulty of filing the transactions when published in Journal form, and Dr. Gilbert thought that this objection could be easily overcome and that by binding and indexing the Journals, a much more complete addition to anyone's library would be had than under the old form of an annual publication.

On motion of Dr. Dobson it was voted that the report of Dr. Peters be accepted and the suggestions contained therein be adopted by the Association.

On motion of Dr. Moulton, it was voted that the retiring President, Dr. Bennet, be elected as Delegate to the American Medical Association for two years.

On motion of Dr. Moulton, it was voted that the power of appointing delegates to the various New England Medical Associations, to the Medical School of Maine and to the insane hospitals be left to the incoming President.

On motion, the President appointed as a Committee on Nominations for the officers of First and Second Vice Presidents, Secretary, Treasurer, Committees on Scientific Work, Public Policy and Legislation and Necrology, Drs. Bowers of Portland, Dobson of Ashland, Wakefield of Bar Harbor, Campbell of Augusta, Peters of Bangor.

On motion of Dr. Peters, it was voted that the suggestion of the Secretary, Dr. Moulton, that a booklet containing a list of members, copy of the Constitution and By-laws, list of officers, etc., be printed and sent to the members, the association not having issued such a publication since 1896, and many changes having taken place since this issue.

Dr. Gilbert of Portland, presented the plan of dividing the work of the Association into sections, and spoke especially of incorporating the Maine Eye and Ear Association as a separate unit in the program. Discussed by Drs. Bowers, Hill, Woodcock, Swasey and Peters. Trend of the remarks seemed to be that the plan would complicate the business of the Association without offering any special benefits and on motion of Dr. Peters it was voted that the matter be laid on the table.

Adjourned.

AFTERNOON SESSION.

1.30 P. M.

Called to order by the President.

Dr. Dobson reported as Chairman of the Committee on Nominations as follows:

First Vice President, W. C. Peters of Bangor.

Second Vice President, L. G. Bunker of Waterville.

Secretary, W. Bean Moulton of Portland.

Treasurer, E. W. Gehring of Portland.

Committee on Scientific Work, F. Y. Gilbert of Portland; John F. Thompson of Portland; W. Bean Moulton (*ex officio*).

Committee on Public Policy and Legislation, Seth C. Gordon of Portland; W. L. Cousins of Portland; E. H. Bennet of Lubec; S. P. Warren of Portland (*ex officio*); W. Bean Moulton of Portland (*ex officio*).

Committee on Necrology, James A. Spalding of Portland.

On motion the Secretary was instructed to cast the vote of the House for the above names and they were declared elected.

Dr. Wakefield of Bar Harbor reported for the Council:

"We have been carefully over the Treasurer's report and find it correct in every particular, with the exception that there is no statement to guarantee what the bank account is.

"The Council has appointed Dr. Swasey as a Committee to look into this, and if he finds it correct, as we presume he will, report to the Secretary."

Voted that the report of the Council be accepted.

The Secretary read the following communication:

New York, N. Y., March 13th, 1911.

Dear Doctor:—At a meeting of the House of Delegates of the American Medical Association held in St. Louis, Wednesday, June 8th, 1911, the following resolution was presented by Dr. Hubert Work of Colorado.

WHEREAS, the plan of organization of the profession carried to its logical conclusion means that every member of a county society should be

ipso facto a member of the American Medical Association, just as every member of a county society is *ipso facto* a member of a State Society, and as it is the ultimate end of the plan, that the American Medical Association should be co-extensive with the organized profession throughout the land, and as nearly if not quite, every State already has adopted the plan so far as making every member of a County Society a member of a State Society, therefore be it

RESOLVED, that the President appoint a committee to draw up details for extending the plan to the American Medical Association, and to present this plan to the various State Societies for their consideration during the coming year, and to make a report at the next annual meeting of the House.

Dr. Alexander Lambert of New York, moved as an amendment that the resolution be referred to the Board of Trustees because it means a separation of the Journal from the membership in a manner which involves the finances of the Association.

The amendment was seconded, accepted and the original motion as amended was carried.

The Trustees have given this matter full consideration and at a meeting held in Chicago on February 3d, 1911, the following resolution was passed:

RESOLVED, that the Board of Trustees refer to the various State Societies the question of the desirability of extending the plan of organization as represented in the foregoing resolution, and request that the various State Societies take action on the matter and report to the Board.

In accordance with this last resolution, I beg herewith to transmit the matter to your Society for consideration, and request that your report be sent to the Board of Trustees, American Medical Association, 535 Dearborn Ave., Chicago, Ill.

Very truly yours,

WISNER R. TOWNSEND, *Secretary*.

DR. W. BEAN MOULTON, *Secretary*,
Maine Medical Association,
Portland, Maine.

On motion of Dr. Wakefield, it was voted that the matter be indefinitely postponed.

Dr. Swasey called attention to the fact that the program this year had been rather crowded and suggested that the number of papers be curtailed next year, so that fuller discussion could be had.

Adjourned.

W. BEAN MOULTON, *Secretary*.

ANNUAL MEETING
MAINE MEDICAL ASSOCIATION

HELD AT

AUGUSTA, MAINE, JUNE 28 AND 29, 1911.

Meeting called to order by the President, Dr. E. H. Bennet of Lubec.

Prayer was offered by Rev. E. M. Slocombe of Augusta.

The following papers were read and discussed:

"The Doctor Himself, as a Business Man," Dr. W. Irving Blanchard of Phillips.

"Dynamic Energy of Man," J. D. Ames of Norridgewock.

"Pellagra." Report of a case with Clinical Demonstration. Henry W. Miller of Augusta.

AFTERNOON SESSION, JUNE 28, 1911.

Called to order by the President.

Dr. F. H. Gerrish of Portland, reported as delegate to the meeting of the Association of American Medical Colleges, and to the conference of the Council in Medical Education of the American Medical Association as follows:—

At the request of the President, I attended the annual meeting of the Association of American Medical Colleges in Chicago, on the 27th and 28th of February, 1911.

Within reasonable limits, it is manifestly impracticable to give even the substance of the papers and discussions; and, indeed, this is unnecessary, inasmuch as these matters have been for some time accessible to the profession in the widely distributed medical journals. The function of my report, therefore, seems to be one of comment and review, and to this I shall address myself.

The purpose of the Association is to improve the standing of medical education, both preliminary and technical; and, as these subjects have occupied a large share of my attention for many years, the proceedings could not fail to invoke my most sympathetic interest. They were characterized by an engaging earnestness which is always vivifying.

Necessarily the Association has a standard of admission to its membership. This must be relatively high in order to attract into fellowship the schools that require more, and not so exalted as to be impossible to those that have a reasonable claim to existence. Even theoretically the situation is not easy, and practically it is beset with trouble. The Association needs to make membership so attractive that every school will want to be included in its roll, for, until this is accomplished its influence will be seriously limited.

The Association started at a time when it was customary for schools to admit any applicant without question as to his fitness for the study of medicine. A principal feature of its requirements was the demand for a preliminary test not large, but genuine, and by so much an advance. Many schools rallied around this standard, and appearances indicated that progress had really begun. But, when the time arrived for enforcing the wholesome and widely advertised rule of entrance examination, some of the most powerful and distinguished members of the Association resigned, being unable to contemplate calmly the imminent prospect of smaller and diminished fees. It is so hard to be moral, when virtue means poverty! Even now a majority of its members is opposed to the immediate application of a rule forbidding the acceptance of students with conditions, which must be made up within a stated time after entrance. It should be obvious to any one that the applicant, who can not pass the preliminary examination, is just the one to whom the work of the first year will be a particularly heavy burden; and yet this very man is the one who is obliged to carry at the same time a load which was too much for his strength in the preparatory school. If the entrance examination means anything, the whole of the requirement is a small enough preparation for medical study; and, when the applicant is unable to pass it, he should be denied admission in justice to himself, as well as to the school, the profession, and the community. Many schools still show that they can not resist successfully the temptation to accept as matriculants applicants whose preparation is markedly deficient; and, so, although the executive committee begged and pleaded for a vote prohibiting the granting of conditions on entrance examinations from the date of adoption of the rule, the time for the first operation of the regulation was fixed at the first of next January, thus, permitting admission with conditions for the next academic year. It would be interesting to know to what extent the conditions actually have to be made up. So much for the attitude of the Association on enforcement of the requirement for admission to medical study.

Concerning the curriculum, the Association has very decided views. Its scheme prescribes the studies for each year, and the number of hours of didactic and of laboratory or clinical work for each branch, but allowing the substitution of laboratory or clinical exercises to a large extent, when desired. Theoretically it is humanly possible to operate on this system; practically it presents difficulties of great seriousness. Even if the student body can endure the implied strain, one may well challenge the specific method. Already a protest comes from one of the best institutions that too much is exacted of the students; and certainly the breaking point is very nearly reached. That it is wise to insist upon so rigid an apportionment of time is not clear. A minimum of hours in each department is a necessary requirement, in order to avoid the excessive development of a few favored branches, in which the teachers are dominant spirits, and bully their colleagues into submission to monstrous demands; but beyond this it is injudicious to insist. It is not desirable that every school should be the exact counterpart of every other: there should be allowed an opportunity for individual development, a chance for the display of originality, encouragement, rather than repression of the untried and novel. In time, doubtless, this inflexibility will be recognized as an evil and be relaxed; but the Association has not yet reached that plane of wisdom. Uniformity up to a certain point is necessary; beyond that freedom for diversity is quite as essential to the best results. Last year, as I am credibly informed, the delegate from one of the most important schools said at the meeting, when

this subject was under discussion, "You may make whatever curriculum you choose; but my school will not attempt to conform to it." Another of the great schools is well known to pay no particular heed to the Association's prescription in this regard. These institutions are too valuable as show-pieces in the membership list to be subjected to discipline, and are permitted to do whatever they please; but it would be unsafe for a weak, or even an average, school to venture on any considerable departure from the standard curriculum. Apparently the controlling sentiment is to the effect that fences are made for cattle; birds fly over them.

A detail of much interest is the prominence given by the leading spirits of the Association to the movement for "whole time" teachers, meaning those whose entire attention is given to the work of instruction. Naturally the branches considered in the first half of the curriculum lend themselves most readily to this plan; but enthusiasts are loudly proclaiming the great advantages of extending the method to all departments. So possessed of the importance of this idea is the Executive Board of the Association that the membership application of at least one school was postponed for a year, principally because it had no "whole time" professors; and this action was taken in spite of the fact that the Association has never included this requirement in its enumeration of necessary qualifications.

In view of the existing opposition which the "whole time" plan encounters from some of the best educators, and its demonstrable failure in some great schools where it has been tried, this rebuff to a reputable applicant for membership seems to indicate that anxiety for ultra-modernity has blinded the Association to the demands of simple justice. Schools that have contemplated applying for membership will be likely to hesitate when they learn of such procedures, preferring to avoid a game whose rules are not all announced before the playing begins.

In the same week in Chicago occurred the meeting of this Association, the Conference of the Council on Medical Education of the American Medical Association, and the meetings of two Confederations of State Boards of Registration so that a delegate to one would attend some of the meetings of the others. It is proposed that the confederations, which now represent different sets of State Boards, shall effect a union which will represent the entire country; and, also, that there shall be concerted action between the Association, the Council, the Confederation and the Carnegie Foundation for the Advancement of Teaching. The last named body (which it is well understood does not include in its membership a man with a medical education) was represented by Mr. Flexner (also qualified for his task by guiltlessness of a knowledge of medicine), who regaled one of the Confederations with a vivacious essay in the trenchant style of his celebrated report of 1910. He still maintains his attitude of lofty disdain, and delights himself with insults to medical teachers. It is humiliating to observe the subserviency of certain schools to this representative of an organization, whose rich endowment is its principal claim to attention. We may well ask ourselves if the report of the Carnegie Foundation on medical education would have caused a ripple of excitement, had it not emanated from a source of possible pensions for veteran and incapacitated professors. Probably it would almost universally have been characterized merely as an unparalleled display of effrontery. However, as long as medical schools continue to applaud the productions of this plutocratically constituted despot, he will doubtless keep on in his impudent and un-

scrupulous career. That good might come from co-operation of the Association of American Medical Colleges, the Council on Medical Education, and the Confederations of State Boards of Registration of Physicians is easily understood; but the wholesomeness of a combination of these bodies with the Carnegie Foundation may well be doubted, for its work hitherto has not been so clearly penetrated with intelligence and actuated by a spirit of fairness as to awaken confidence in its future proceedings.

At the Conference on Medical Education, which was held immediately after the meeting of the Association, many interesting discourses were given. The general impression left upon my mind was that there is a tendency toward more freedom, without abandonment of essentials—a highly desirable disposition. No new rating of teaching institutions was announced, but the gratifying news was given that a large number of unfit schools had given up the ghost. On the whole the various meetings gave evidence of progress, and also convinced the experienced observer that there is still room for vast improvement.

FREDERIC HENRY GERRISH.

Portland, June, 1911.

On motion of Dr. Addison S. Thayer, seconded by Dr. F. H. Jackson, it was voted that the report of Dr. Gerrish be accepted and referred to the Committee on Publication.

Dr. B. L. Bryant, Visitor to the Insane Hospitals, reported as follows:—

Report of Visiting Committee of the Maine Medical Association to the Insane Hospitals.

Gentlemen:—I wish first to make a few general statements and give a few statistics.

On November 30, 1910, there were 1,341 patients in the two hospitals: 902 in Augusta, 439 in Bangor. During the previous year, there were admitted 544: Augusta, 309; Bangor, 235. During that year there were discharged

	Recovered.	Much Improved.	Improved.	Not Improved.	Died.
Augusta,	47	27	47	38	115
Bangor,	21	8	24	16	54
	<hr/> 68	<hr/> 35	<hr/> 71	<hr/> 54	<hr/> 169

At the close of the year there had been an increase in the two institutions of 109.

The appropriations for the maintenance of the hospitals during the year 1911-12 were materially reduced by the last legislature so that there is less money available for the maintenance of the hospitals than last year, in spite of the large increase in the number of patients. There has been a steady reduction in the per capita cost of maintaining patients with the growth of the hospitals, but it will be impossible to maintain the present number of patients without exceeding the appropriation during the next two years, providing the present standard of care and treatment is maintained.

The bill for voluntary commitment of patients, although passed by the legislature was vetoed by the governor, much to the regret of the medical profession. This necessitates the continuance of the cumbersome and some-

what barbarous method of commitment and deprives many of the benefit of hospital treatment to whom it should be extended. The parole system is working out well. Suitable patients are allowed to go out in charge of their friends on trial. They can be returned at any time before six months without a recommitment.

During the last decade, the function of a State hospital has materially changed. Formerly it was a sort of warehouse where the mentally unfortunate were stored for safe keeping. The political success of the Superintendent depended upon the smallness of the per capita rate for the storage, and no questions were asked as to the methods used so long as the rate was low.

Today the hospital, through modern methods of psychiatry has become a mental repair shop where the mentally unfit are received, and while cared for are individually studied and treated. Some are cured and go back to their former positions in life as wage earners. Others so far recover as to be able to return to their friends and contribute something to their own support. Still others become an economic factor in the institution itself, under supervision being able to carry on part of the routine work, greatly to their own benefit and a financial saving to the State. In other words the chief end of treatment today is to so repair the mentally unfit so that they may contribute as much as possible to their own support and in so far as possible, relieve society of the burden.

It is universal comment that the regular practitioner takes very little interest in the case of the insane, or in what goes on in an insane hospital. Very few have any idea of the amount of the scientific medical work which is being done for the insane. I certainly did not until some three years ago when I began to do clinical work in the Bangor Hospital. I soon found out how little I knew of real mental diagnostic work. The work became so interesting and profitable that I put in all my spare time there for months, attending case readings and clinics and working out cases in the wards. For diagnostic work in general practise the experience is invaluable. When the general practitioner finds a case he believes to be suffering from some form of insanity, he gets some other member of the profession to agree with him, and after a more or less tedious process of red tape, the patient is committed to one of the hospitals. The physician's interest usually ends here.

In brief outline, this is what usually happens to the patient after entering the institution. The patient is placed in one of the wards under the special charge of one of the assistant physicians who prescribes the immediate necessary treatment, which is carried out by a nurse who keeps daily notes and charts of temperature, pulse, medicine given, amount of nourishment taken, and remarks on the general conduct of the patient. The patient is weighed and the urine sent to the laboratory for examination. From the time of admission, the patient is under the constant supervision by physician or nurse. As soon as convenient, an exhaustive physical examination is made by the physician, which is recorded as part of the case records. After the physical comes the neurological examination, which includes the test for the neuromuscular condition, the condition and function of the cranial nerves, the different reflexes, the tests for sensation. At this time, usually the previous history as given by the patient is taken.

Next follows the mental examination. This includes

The general appearance and attitude, characteristics of speech.

Consciousness and orientation, school knowledge, calculation ability.

Characteristics of writing, hallucinations, memory, associations of ideas.

Judgment and conclusions of patient, emotions, will, social relations, etc.

Sometimes these examinations can be made quite rapidly, according to the degree of intelligence and co-operation of the patient, at other times only in piecemeal, extending over a long period of time. During all the time the patient is encouraged to talk, and notes are made of the conversation. By getting the confidence of the patient, various fears and delusions or hallucinations can be brought out. All of this work is necessarily individualistic and personal. And to overcome fear and suspicion and get through the various mental complexes to the real personality often takes a great amount of time, and one may not be successful until after weeks or months of patient daily effort.

After the patient has been in the institution for some time, and as much information as possible has been collected and tabulated, the case is brought before the whole staff for general consultation. The physician who prepared the case reads the history and findings and then brings in the patient for general examination and questioning. After the patient retires, then each member of the staff expresses his opinion of the case as regards diagnosis and prognosis. These case readings are held usually four times a week, and are very interesting and instructive to the general physician. Often no definite conclusion as to diagnosis can be made, and weeks or months later in the progress of the case, new conditions may develop, and the patient comes up several times during the year for consultation and opinion. Some of these cases represent an immense amount of work and when the case history is finally filed away with the daily notes of the attendant, it has reached the size of a small volume. All of these records are typed and indexed for future reference, and are added to, if the patient returns, as many do, from time to time.

Now something as to the treatment of these cases. In both institutions, straight jackets and other restraining appliances have gone out of use, and very few patients are confined to their rooms during the day. Cold packs and baths take the place of the hypodermic and sedative drugs. Some manic cases enjoy the continuous tub bath where they can get in and out anytime during the day when the mood seizes them. Watchfulness, kind treatment and gentle persuasion will keep the very worst under control. In so far as possible, the patients are kept employed about the institution according to their strength and capacity. Others go out for their daily walk and exercise in the open air. It is remarkable how soon the most violent and manic cases quiet down through these simple measures.

Both institutions, until very recently, have been hampered by lack of laboratory facilities and competent pathological assistants. Well equipped laboratories are now under way, and very soon, besides the ordinary examinations of urine, blood and sputum, they will be in a position to work up the microscopical findings in autopsies, do work on spinal fluids, and Wassermann reactions, and some original research work.

Gentlemen, we take great pride in our institution in Bangor. The good work begun by Dr. Mitchell has been carried on and new and important features added by the present Superintendent, Dr. Hills. Under him we have an institution modern in every way, both in buildings, equipment, and in up-to-date scientific treatment. And everything is running in perfect harmony under its efficient head.

Here at Augusta we are to be congratulated in having such a man as Dr. Miller at the head of this institution at the present time. Strong, energetic,

perfectly equipped through long experience in mental and institution work, he is fast shaping an institution up-to-date in all its departments. Both of these efficient men should receive the hearty support and co-operation of every member in the profession. I would urge every man present to visit these institutions and get in touch with the work being done there. Encourage by your interest the excellent work these men are doing for our institutions. Politics should not enter into the management of hospitals of this kind. Sufficient appropriations should be made to furnish every necessary facility for modern scientific work. And the way should be made as easy as possible for those in need of help to obtain the care and treatment, without unnecessary delay and undue publicity. These unfortunate charges of the State should be supplied with every necessary means for their recovery, that at the earliest moment as many as possible may become self-supporting citizens.

DR. S. C. GORDON OF PORTLAND:—

Mr. President:—I simply want to practically endorse whatever Dr. Bryant has said in his report. I am satisfied that the profession generally do not understand quite what is being done in this direction. It certainly was new to me when I first went on to the board of trustees, and it has been a matter of a good deal of interest since. All that he has said is absolutely true, and he has not even gone into all of the details in regard to this matter, although he has given a very concise and very intelligent summary. I think the profession may feel very well satisfied that we have at the head of the two institutions in Maine, men who are thoroughly up-to-date. They are young men comparatively, but they are men who have had large experience, men of original cast of mind, men who think for themselves, and I believe we should make a great mistake if we should lose either of those men from the hospitals now. Certainly Dr. Hills has made good at Bangor, and Dr. Miller, while he has not been here very long, as far as this part of the matter is concerned has made absolutely good professionally. I saw a letter the other day from a man who is a possible candidate for the position in case Dr. Miller leaves, a man who has had a large experience in one of the hospitals in New England, in which he said, "I should certainly not be a competitor at all against Dr. Miller, provided he desired to remain. I consider him far ahead or at least the superior of any man in this line in New England." So that I think we may well say that the two insane asylums are practically under the very best management professionally. All of the old restraints formerly used in asylums, as Dr. Bryant has said, are entirely abolished, and it is wonderful to see with what ease these very violent cases are managed, contrary to our expectations and contrary to our old ideas of this matter. I certainly feel that Dr. Bryant has given you the thing in a very concise and intelligent manner, so that every one of the profession may fully understand what is going on now in those two institutions.

DR. H. W. MILLER OF AUGUSTA:—

Mr. President:—I feel that I should say something after the very pleasant words of Dr. Bryant and after the remarks of a member of our Board of Trustees, Dr. Gordon. It certainly causes a feeling of satisfaction to know that our efforts on behalf of the insane are appreciated by men who know what they are talking about. I am very glad that Dr. Bryant has had an opportunity to get an insight into the nature of the work which is being done in the hos-

pitals, and I wish that the physicians in general would show more of an interest in our problems. One of our largest fields of work is in the field of prevention. There are a number of insane and there always will be a number of insane, and one thing which we have to do is to spread broadcast the knowledge which we have which will enable us to stop, or to control to some extent, insanity. We who are in the work have certain knowledge as to causes of insanity. We know, for example, that practically fifteen to twenty per cent of all insanity is produced or caused by alcohol, that is, in other States outside of Maine, and we know that about fifteen to twenty per cent is caused by syphilis; we know a marked percentage, from thirty to forty, is caused by faulty mental hygiene. And yet I don't think we have done our duty in instructing the profession as to what we know, and the only way we can possibly reach the public, the people whom we are after, is through the members of the medical profession. And I am extremely anxious to have the physicians co-operate with us, come and see what we are doing. We haven't anything that we are ashamed of and we are always very glad to have the physicians visit the hospitals. The hospitals are open at any time to physicians. I thank Dr. Bryant and Dr. Gordon for their very kind remarks.

DR. B. L. BRYANT:—

Gentlemen:— I wish to offer this resolution:

"The members of the Maine Medical Association hereby wish to express their hearty approval of the advanced scientific medical work now being carried on in the two State Insane Hospitals, as reported to us by the Visiting Committee of the Association. We recognize the importance of this work from a medical and humanitarian standpoint, and through these resolutions we desire to express our confidence in our two Superintendents Drs. Miller and Hills, through whose efforts the institutions are being developed along truly modern and scientific lines. Both of these men come to us from a long and successful experience in the care of the insane and institutional work, and we wish them to know that as physicians, we appreciate the thorough and scientific work they are doing, and that they have the confidence and the hearty co-operation of every member of the profession."

On motion of Dr. Harris, seconded by Dr. Smith, it was voted that the resolution offered by Dr. Bryant receive the unanimous acceptance of this Association.

PRESIDENT BENNET:

Members of the Maine Medical Association, I am glad to have the privilege of introducing to you Dr. Murray of New Brunswick, who comes to you as a delegate from the New Brunswick Medical Society.

Mr. President and Members of the Maine Medical Association:

It is a pleasure to me to be one among you this day, to be affiliated with your Maine Medical Association which has been doing business for more than half a century, for is not this the fifty-ninth Annual Meeting. I take it that today the talent in medicine and surgery in the great State of Maine is fairly well represented here and let me tell you that according to my judgment, this is the most important meeting that Augusta will have until we meet again. For is it not one of our main objects to promote and advance the science of

medicine and surgery, to go forward in these important subjects not as single units but as a body of men enthusiastically devoted to our calling, and to the amelioration and cure of disease and the prolongation of human life, and is it not a fact in the medical man's life and make-up that he always loves himself last. Has he not the three great foundations of success, abnegation, concentration and enthusiasm. Abnegations to forget tenses in one's accomplishments, concentration to work out details, enthusiasm to lift one out of one's self by his own supreme energy, and let me say there is not such a thing as accident in man's success in medicine; if he has the accomplishment and is trained he wins when the opportunity offers, otherwise, he fails. Character is the foundation of all great work, a medical man's work is not only his reward, but his refuge. It is only the mechanism and initiative things that can be paid for in money. Character, genius and reputation, a man has not the right to sell. The patient can pay for the time, the skill, and experience of the surgeon. But he cannot pay for the devotion which keeps him at the bedside of the dying patient, working until the last spark of life is gone.

I will now say a few words regarding The New Brunswick Medical Society, of which I am a member and a delegate to this Association. The New Brunswick Medical Society dates from the passing of the New Brunswick act in 1881. It holds its thirty-first annual meetings in the City of St. John on July 18th and 19th next. All the duly registered medical practitioners under the act of 1881 constitute the New Brunswick Medical Society, and there are 273 regular medical practitioners in the Province.

The Act as amended from time to time defines the powers and functions of the Society. From among the members of the Society is evolved the Council of Physicians and Surgeons of New Brunswick. It consists of nine members, five chosen by the New Brunswick Medical Society and four by the Government of New Brunswick. The Council of Physicians and Surgeons carry out the provisions of the Medical Act, such as penalties for non-compliance with the act or infringements, such as unprofessional criminal acts. It also prescribes the preliminary literary qualifications which a student of medicine must pass in order to have his diploma registered after he receives it. It likewise examines graduates in medicine on such professional subjects as the law directs or Registers them if no examination is necessary.

On the Act of 1881 coming into force every man who held a diploma from a recognized school was registered. Also all who could show evidence of a partial course but who had no diploma, if they had been in actual practice in the Province for 25 years preceding the passing of the Act of 1881. By the Act a standard of Matriculation was set because it was thought that the entrance examination of many medical schools was too low. Graduates were required to attend a medical school of good standing for three years and then submit to a professional examination before the Council of P. and S. Or if they held a diploma from a college requiring four full years, they were registered without examination. Later the Act was amended so that no matter how long a man studied and if he had a cart load of diplomas, he had to be examined.

Lately all the Canadian Medical Schools raised the Curriculum to five years, and at the last session of the New Brunswick Legislature the New Brunswick Medical Act was amended to meet that change. This year, 1911, a Dominion Medical Act was passed by the Canadian Government at Ottawa. It provides that any physician who is registered according to the law of any Province of Canada can practice in any other Province from ocean to ocean on presenting

a certificate from the Registrar of his own Province and paying whatever registration fee is required in the Province emigrated to. That Act owing to circumstances cannot come into force until the middle of 1912.

The scientific and social side of the New Brunswick Medical Society is like that of any other.

There is also the Maritime Medical Society which includes the Maritime Provinces, and lastly there is the Canadian Medical Association, which includes all Canada.

Prior to the Medical Act of 1881, that is, thirty years ago, the practice of medicine in New Brunswick was a go-as-you-please business. The laws just required a man to have a diploma from some Medical Institution. If he did not have one he could not collect fees, at least not legally. In the early days many excellent physicians from the Old Country were scattered over the Province, also as far back as 1783, many learned men of the medical profession were found among the United Empire Loyalists who emigrated to New Brunswick. There were of course the native born practitioners who studied medicine for one or two years, and this combined with good sense and very large practices and long experience on the firing line made them wonderfully efficient.

Taking the great mass of New Brunswick physicians and surgeons today, and they are as firmly grounded and as well posted and as up-to-date as can be found elsewhere, and to what course do they owe it? Is it not mostly due to organization as I mentioned before? The medical societies have compelled the government to make salutary laws excluding the ignorant, and driving the quack out of business.

In conclusion, I will mention one regrettable fact, that there is a small minority who are never seen at a Medical Society. Those are they who are in such eager pursuit of the dollar and so childishly blind to their own interests and the interests of the medical profession at large that they are forever conspicuous by their absence. Let me tell you they do not know what they are missing. Apart from the knowledge disseminated and the ideas inculcated, they miss the touch of nature and of brotherhood which makes the whole world akin, and which fills a man with higher resolves and sends him back to his work, more of a physician and surgeon than ever he was before.

President Bennet introduced Dr. Blair, a delegate from Massachusetts:

Mr. President and Members of the Association:—

I did not understand I was to make a speech. A man whom I know very well represented the Society last year and on his return he told me he heard a few inquiries down here from a few of my old classmates and asked me if I would care to come down this year. And it was with a great deal of pleasure that I accepted the opportunity to come down and visit you this year. I have never ceased being proud of the fact that I received my training from medical institutions of Maine, and I am doubly glad to be here and greet my classmates and associates and members of the faculty of the Medical School.

President Bennet introduced Dr. Stanley of Vermont:

Mr. President and Members of the Association:—

It would be words wasted to tell you of my pleasure in being here. I am a little bit late but in time for the introduction. I am very glad to be here and I am sure shall enjoy all the meetings, because I always like to get together with medical men.

PRESIDENT BENNET:

We shall be very glad to invite these delegates to participate in any discussion, to feel themselves perfectly at home, and let us profit by their presence.

The Vice President, Dr. Addison S. Thayer, was called to the chair, during reading of President's address.

On motion of Dr. F. H. Jackson of Houlton, duly seconded, it was voted that a committee be appointed to take into consideration the recommendations of the President in his annual address.

The following papers were presented:

"Cerebro-Spinal Meningitis," by R. E. Donnell of Gardiner.

"The Need for State Control of Public Water Supplies," H. D. Evans of Augusta.

On motion of Dr. Gordon, duly seconded, it was voted to postpone the discussion of Dr. Evans' paper until tomorrow morning.

Adjourned.

MORNING SESSION, JUNE 29, 1911.

Meeting called to order by the Vice President, Dr. Addison S. Thayer.

Discussion of Dr. Evans' paper.

Report of the Committee on Public Policy and Legislation, by Dr. S. C. Gordon, of Portland.

Mr President and Members of the Maine Medical Association:

Some time during the autumn of last year, I was appointed by the President of the Association as the Chairman of this Committee on Legislation, being at the time the member from Maine on the National Legislative Committee. Before the meeting of the legislature, many of the members of the Association deemed it best to ask for some changes in the Registration Law. The Cumberland County Society took the initiative in the matter, and appropriated one hundred dollars to engage counsel to aid in revising the old law and suggest the legal lines in drafting a new or revised law. Several of the members of the Society met with your Chairman from time to time, when all the failures of the old law were very elaborately discussed and propositions for a modification of it, also features for the new statute.

Hon. H. R. Virgin, formerly President of the Senate, was engaged as legal counsel for the temporarily organized Committee. After many meetings, the bill, as finally passed by the Legislature, was agreed upon. The essential features of this bill were defining the term doctor, and fixing the penalties for practicing medicine or surgery under the title of doctor, unless a certificate or license is obtained from the Board of Registration, after the examination by the Board and successfully passing such examination as is prescribed by

said Board. Several subjects have been added to the list, which the applicant will be required to pass an examination upon. The fees for the members of the Board have been definitely fixed in the new law, so that each one shall know just what the salary will be. Heretofore a per diem gave large range in the matter of fees. The fee for applicants for Registration is raised from ten to fifteen dollars, in order to give the Board a longer time for examination, and to take up the added subjects. The usual exceptions are made for the various cults.

The bill, as prepared under the supervision of the Committee and Mr. Virgin, was introduced early in the legislature and all soon found that it would meet with more or less opposition from the various isms, so prevalent throughout the State.

The Osteopaths renewed their attempts to be recognized by a full, separate Board from their own members. By their own showing, they had but eighteen members in the State, in what they were pleased to call "in the Association." Their plan was to ask the Governor to appoint six from ten of these eighteen, the ten to be named by the Association. These six were to constitute a district and separate Board to examine all Osteopaths applying, if they complied with the qualifications set forth in the bill. Their first bill was very much revised and enlarged after our registration bill had been before the Committee. The second bill was copied almost verbatim from our bill, in the essential features. We soon learned that it was to be a "battle royal" and all must be prepared to meet a strong lobby, backed by many prominent men and women throughout the State and abundance of money to pay lawyers and other shrewd lobby workers. From all sections of the State came hundreds of letters, to every member of the legislature, filled with all sorts of mis-statements. With this knowledge before us, we deemed it best to ask the President of the Maine Medical Association to call a meeting of the House of Delegates, to authorize an expenditure of money from the funds of the Association to meet the current expenses of fighting this array of money and talent.

Accordingly, a proper petition was sent the President, who at once responded by issuing the necessary call, and a majority of the Delegates assembled at the capitol and gave full authority to the Legislative Committee to employ such agent, or agents, to act as they deemed best to prevent the passage of a bill which practically would place an Osteopath on the same plane as the regular profession. Mr. Virgin was employed to go to Augusta and use all means he deemed necessary to present the true situation to the members of the committees before whom the two bills came and after the hearings to make a close canvass of the individual members of each branch of the legislature daily. This was long and tedious labor. The stream of letters and special efforts from people who were constantly besieging their representatives to aid the Osteopaths, had to be met by day and by night vigils. The report of the committee was "ought to pass" by a large majority of the committee. A minority report by Representatives Scates and Peters "ought not to pass" came into the Senate where it originated and after a very full and free discussion on the two reports, the minority report passed by a vote of sixteen to fifteen (16 to 15). Drs. Moulton, Edwards and Chandler made telling speeches as well as doing personal work among the members of the Senate. Less than one week before the vote was taken, we were almost sure of a vote in our favor of eighteen to thirteen (18 to 13), but outside influences caused several to change their vote. From the admission of the leading Os-

teopaths, who were present most of the time, we are sure that several thousand dollars were available for carrying on their campaign. One of the practitioners of the cult from New York was said to receive eight hundred dollars to appear before the Committee.

It was deemed best by a majority of the Legislative Committee, not to present before Committees of the Legislature the methods of practice of the Osteopaths, but wait until it came into the Senate and House and there make the arguments based upon their theory of disease and modes of treatment. In the opinion of your Chairman, this was a mistake and lost us votes in the Senate, in spite of the able presentation of these points by Dr. Moulton. Too many senators had made up their mind before, and while they admitted afterwards that had they known of these absurdities at the hearing, it might have changed their minds and vote.

The situation in the House was a quite different affair. Many prominent men had by that time become thoroughly acquainted with the facts and were prepared to talk intelligently upon the subject and to meet the sophistry of his contestants. Hon. Joseph Williamson did faithful and efficient work, both among individual members and on the floor. Hon. Clark Scates stood with Williamson in fighting for the credit and honor of the profession. Drs. Sleeper, Ames and Littlefield, especially, were earnest in season and out of season, to combat with the mis-statements that were hourly put in circulation by the hired lobbyists.

We are also very much indebted to scores of doctors throughout the State for not only appearing before the Legislature and doing individual work among the members, but bringing to bear upon the community in which they live, influences that had an effect upon the representatives of their various sections. The final vote gave nearly three to one (3 to 1) in our favor, the adoption of the minority report "ought not to pass."

I have yet to learn of one dollar being paid to a member of the profession for services rendered in connection with the entire campaign. Your Chairman gave freely many days and nights and paid his own expenses. We believe the profession of the State may well take credit for accomplishing what many other States have failed to accomplish. The Treasurer's report will show that the expense has not been very large.

S. C. GORDON, *Chairman.*

On motion, duly seconded, it was voted that the report of Dr. Gordon be accepted and referred to the Committee on Publication.

DR. OWEN P. SMITH OF PORTLAND:

I think before this report is passed over, the very least this Association can do is to express in no small way the appreciation of the work that Dr. Gordon did in this matter, last winter. When this thing was first approached, it was practically a lost cause, no apparent hope in the matter whatsoever. He went into this matter with a great deal of enthusiasm. He went among the legislators, and by a campaign of education pure and simple, he put up before these men the thing that the community were coping against. It is not a question that the profession have any reason to worry about. But talk about polluted water supplies, lead poisoning, epidemics of typhoid and those things,—they are insignificant matter compared with the harm

that this cult of osteopaths are beginning to do all over our State, and this Association should not sit here today quietly and simply accept this report. We have this same matter coming up two years from now and four years from now, and six years from now. And not only the Osteopaths, but two years from now there will be some other 'path coming up, as bad or as good as they are, and we have got to be on the watch all the time, not for the protection of the profession, because they are amply protected, but for the protection of the public. And I hope that a legislative committee will be appointed from this Association to take under advisement some action for us to pursue indefinitely, and we have got to work out some logical solution of this problem. And it seems to me, instead of waiting until the very last minute and being obliged to appropriate funds for this purpose, we ought to begin today to impress upon the profession throughout the whole State the importance of acting in these matters. Letters by the gross were being sent all over the State and not over ten per cent of those letters received any response from the very best men in our profession. It is perfectly easy to sit here at home and say this should not be so and that should not be so, but in order to prevent these evils you have got to fight them the same as you have all other evils, and you must do something in this matter. Dr. Gordon gave work this year. He will give work two years from now if it were in his province to do so, but we haven't got three or four or five hundred Dr. Gordons in the State of Maine, and we have got to have a big lot of lesser workers to take his place, and I don't want this Association to ignore this thing. And I move you, Mr. President, that some fitting committee shall be appointed here today with power throughout the whole State and the county societies to work this matter up, a special committee, with this one thing in view, this matter of legislation.

DR. W. C. PETERS OF BANGOR:

Mr. Chairman, I move that the thanks of this Society be extended to Dr. Gordon and the other members of the Committee for the excellent work that they have done.

DR. JACKSON:

I move it be done by a rising vote.

(Motion seconded and unanimous vote.)

DR. PETERS:

I move that the Committee which has been appointed in the House of Delegates to bring in names of committees, be instructed by this organization, if they can see their way clear, for they have absolute power, to present the names of the present legislative committee to

be continued. That is the most this meeting can do is to ask that Committee to continue that Committee.

(Motion seconded and so voted.)

Report of Visitors to the Medical School of Maine, by Dr. A. L. Stanwood of Rumford.

On motion, duly seconded, it was voted that this report be referred to the Committee on Publication.

PRESIDENT BENNET:

Members of the Maine Medical Association, it affords me a great deal of pleasure to have the privilege of introducing to you Dr. Emery of St. John, New Brunswick, who is President of the New Brunswick Medical Society.

DR. EMERY:

Mr. Chairman, ladies and gentlemen:—I did not come here with the expectation of making a speech. I told Dr. Bennet that I came here to get some pointers for the purpose of carrying them out at the meeting of the New Brunswick Medical Association, which meets on the 18th and 19th of July. At this point, I take the pleasure of inviting any or all the members of the Association to be our visitors at that time. We will do the best we can to look after you. We have not as large an association as you have here, but we have a small and somewhat enthusiastic one when we get started. I think I have met some of the gentlemen here, I see some of the faces that have been down there. I have never been here before, and while I am not a delegate—Dr. Murray of Deer Island is the delegate from the New Brunswick Medical Society,—as President, I thought I would take the chance to come on and just see what the State of Maine looked like in its headquarters, and especially as some of my forefathers were born in Waterville, Maine. My grandfather happened to be born in Waterville, Maine, got over to the other side,—I suppose you consider the wrong side of the line.

I was much interested in the question of the State supervision of water supply. We have the same trouble, or are going to have it, in St. John, as you have it around in the State of Maine, because while we have what we consider an excellent water supply for the City of St. John, at the same time now, around the lake where we get it, about nine miles from the city, are a number of small houses, shacks and small houses, springing up, and I suppose just the same trouble will occur with the water there as probably is occurring here.

There is another thing I heard that made me kind of smile, it seems to come up wherever you go, and that is Osteopathy. We have been having trouble with it there. We haven't so many of them there but they are just as active. And last year, we tried to get some justice in our medical act at Fredericton, and there was so much opposition—they tried to get in their bill right in the middle of it, and they probably would have succeeded if we hadn't withdrawn the bill. So that we didn't do as well as Dr. Gordon and his committee succeeded in

doing. We tried it hard enough but we would have lost if we had persisted. They are very aggressive, and I see they are aggressive here as well.

The following papers were read and discussed:

"Surgery of the Appendix," H. H. Crane of Bangor.

"The Organization and Work of an Anti-tuberculosis Association in a Small Community," A. A. Downs of Fairfield.

"Therapy of Nephritis," R. A. Parker of Auburn.

Adjourned.

AFTERNOON SESSION, JUNE 29, 1911.

The name of Stanley P. Warren of Portland was put in nomination for President of the Association for the ensuing year by Dr. Gordon, seconded by Drs. Sturgis and Jackson.

On motion, duly seconded, it was voted that the nominations close.

On motion of Dr. Jackson, duly seconded, it was voted that the Secretary cast a ballot for the election of Dr. Warren as President of this Association and Dr. Warren was declared elected.

DR. WARREN:

Gentlemen of the Association, I am overcome by the honors that have come to me. I appreciate the honor of the election to this office, the highest office that can be given to a medical man in our State. I promise you the best that I can do at the next session and I ask the same loyalty at the next session that you have shown at the present one. I thank you for the honor.

"Report of Committee on Venereal Diseases and their Prevention," by Dr. F. N. Whittier of Brunswick.

Mr. President and Members of the Association:

Your Committee was appointed last year at the suggestion of Dr. Phillips and charged with the duty of investigating and formulating a plan, if deemed advisable, for the prevention of venereal diseases.

To some extent the committee has carried on such an investigation and is now prepared to report a plan for the beginning of a fight against these diseases in this State.

The Committee wish to acknowledge its indebtedness to Dr. Phillips for Health for literature and suggestions. Your Committee has worked along three lines.

1. Collection of statistics regarding the frequency and disastrous effects of these diseases.

2. Investigation of what has been done along this line abroad and in this country.

3. Consideration of various plans for the prevention of venereal diseases.

As a result of a study of statistics, your committee is convinced that there is a good reason for believing that venereal disease destroys more lives than does tuberculosis.

That venereal disease is more prevalent than all other severe contagious diseases combined.

That taking into consideration the sterility, the wrecked homes and ruined lives caused by venereal disease it is the worst evil in the world today.

As regards what has been accomplished, your committee believes the greatest advance has been along the lines of awakening the world to a higher ideal of sexual morality. Education has been the most potent force thus far. The licensing of houses of prostitution does not seem to work out well.

Plans for prevention have been given by the Committee of the American Public Health Association and published in the March number of the Journal of the Association.

In general these plans seem to be ideal but many of them not immediately practical.

The work of your committee has been to formulate a beginning of what must be a long campaign. It is felt that it is desirable to make such a beginning at once and that if we do not begin, we can not go on. The committee feels that public opinion demands more action, and that the initiative should properly be with this Association and with the State Board of Health.

The following recommendations are therefore proposed:

1. That this Association recommend to the State Board of Health the sending out of circulars of information on Sex Hygiene to school superintendents with the request that such circulars be distributed among teachers, also among pupils when it is deemed advisable.

2. That the Association recommend to the State Board of Health that syphilis, gonorrhea and chancroid be added to the list of diseases which physicians are required by law to report to the State Board of Health, with the provision that the diseases mentioned may be reported by number instead of by name and shall be accompanied by the physician's statement relative to facts concerning source of infection.

3. That a committee of this Association be appointed for co-operation with the State Board of Health in carrying on a campaign of education of the public as regards the importance of the prevention of venereal disease.

(Signed) F. N. WHITTIER,
A. L. STANWOOD,
E. E. HOLT,
F. H. JACKSON,
ADDISON S. THAYER.

On motion, duly seconded, it was voted that the report be accepted and referred to the Committee on Publication.

DR. PHILLIPS:

I wish simply to say that I have read carefully the report and I heartily concur with the spirit of it and the letter of it. I make a motion that a committee be appointed by the Chair for the purposes named in the report of the Committee.

PRESIDENT BENNET:

Do I understand that I am requested to appoint a new committee?

PROF. WHITTIER:

The recommendation is that a Committee of this Association be appointed for co-operating with the State Board of Health in carrying on a campaign of education of the public as regards the importance of the prevention of venereal disease. I would say that I have talked this matter over with Dr. Young of the State Board of Health and that he believes the State Board of Health will favor the three recommendations of the Committee, the sending out literature to the State Superintendents, the requiring of venereal diseases to be reported by number not by name, and that the State Board of Health will be willing to co-operate with a Committee of this Association in any reasonable way. A number of things have been suggested that such a Committee might do. One thing that occurred to us was that literature, circulars, might be sent out to parents of children in different parts of the State. A list of parents having children of the age to be influenced by such circulars could be readily secured and circulars sent to those parents with the request that if they thought best they should give those circulars to the children to read, and if they did not think best that they be asked to write back to the Committee and state their objections to the circulars. The idea is two-fold, to start in on a campaign of education to educate the parents, and, secondly, if possible to get the co-operation of the parents in presenting this matter before the children. The idea was that it was a first step that might be taken, and it was believed, by some members of the committee at least, that if we had a committee of this sort that funds would be provided by philanthropists for beginning such work. Bowdoin College has been doing something for several years, and this year has received a fund of \$5,000, almost without solicitation, for carrying on this work among the children. Dartmouth College has received a similar fund during the year. There are philanthropists who have this matter at heart, and any committee able and willing to carry on this work I believe will secure funds for carrying it on.

DR. WARREN:

I suggest, in view of the fact that this committee have made a special study of this subject and are more familiar with it than a new committee would be, that they be appointed to continue the work.

(Motion seconded and voted accordingly.)

Report of Cancer Committee, by Dr. G. B. Swasey.

Your Committee beg to present the following report. Of late years, much has been said and written in connection with this subject and we feel that it

is hardly necessary for us to urge its importance. We believe that the members of the profession of our State are already familiar with the terribleness of the disease known as cancer, as it manifests itself in its varieties of form. Not only that but we believe the members of our profession are fast becoming, if not already fully convinced of the absolute necessity of an early recognition of this disease if any degree of relief is to be held out to our patients. But however fully or otherwise the members of the profession realize the importance of this subject, this Committee has been appointed to direct its thoughts and suggestions primarily, to the needs of the Society. While this is true, it is fully recognized that the doctor always has and must remain the most important factor in this great work, and that his personal intelligence and influence are the foundation of all we undertake or accomplish, but, as we have said, it must be assumed that these facts are well understood by any doctor who is fully worthy of his degree. Desiring to learn what has been accomplished by the American Medical Association in connection with public instruction on medical topics, a communication was sent last April to Dr. Craig of Chicago, who has acted as Assistant Secretary of the American Association.

This communication was referred to Dr. Frederick R. Green, Secretary of the Council on Health and Public Instruction. Dr. Green replied saying that the present council on health and public instruction is the successor of the original Committee on the prevention of cancer; this Committee originated with the section on cancer and was first appointed in Boston, in 1906, and later on became the Board of Public Instruction on medical subjects, the scope of the Committee being broadened to include other subjects besides cancer. This Board, for some reason did not accomplish very much and finally, at the last session of the Association it was merged, together with other standing Committees, in the present Council. Dr. Green goes on to say "we are preparing a series of pamphlets for public distribution on a number of topics of which the prevention of cancer and the importance of its early diagnosis will be one.

He suggests that our Association carefully consider the advisability of a State Committee on public education, to co-operate with the national organization and to look after local problems.

He further states that nothing definite has been accomplished along this line with the single exception of what has been done in Colorado and possibly Pennsylvania. Colorado has done quite definite work and we communicated with Dr. C. E. Tennant of Denver who is chairman of the Press Committee of the State Medical Association.

This Press Committee was formed through the advice of Dr. McCormock of the American Association and has expended \$100 annually, which sum has been rated by the State Society for the past three years.

This work has consisted of assigning certain subjects to physicians throughout the State, asking them to prepare an article for publication, the same to be well adapted to the laity, and to be submitted to the Press Committee for revision.

These are then published in the leading papers of the State, under the auspices either of the Society or of the Press Committee, the writer's name being withheld in order to avoid the objectionable feature of personal publicity.

The Colorado Society is presenting, in this way, many subjects to the public chiefly embracing contagious diseases. It is evident from Dr. Tennant's letter that a large amount of detail work is demanded by the Committee and he states that the appropriation of \$100 would not accomplish much did they

not also receive the assistance of many philanthropic and public-spirited people.

The work of the Colorado Society is much more comprehensive than that under the immediate consideration of your Committee and has been referred to chiefly to show the methods being adopted to carry on their work.

While, up to the present time, the States of Colorado and Pennsylvania are the only ones which have done definite work in the line of educating the laity in a direct way, it is apparent that this work will soon be taken up generally by our profession and no branch of the work can be of more importance than the early recognition and prompt treatment of cancer.

In making the above statement we are not unmindful of the extent of the work done in educating the public in connection with many contagious diseases, such as tuberculosis, typhoid fever, diphtheria, etc., but much still remains to be done, and no branch of the work demands more prompt and urgent effort than the one under our immediate consideration.

Your Committee would respectfully recommend that a Committee of three or more be appointed by the chair, whose duty it shall be to take charge of the education of the public on the early recognition and prompt treatment of cancer. While it is not the duty of this Committee to dictate what the definite work of such a Committee shall be, it may be well to suggest what appears to us well to have accomplished.

It would seem desirable that at least four articles should be secured from members of the profession of our State, or from physicians outside the State, and that these be published in the leading papers in the State. *Secondly:* That any county society be requested to have this subject presented to its Association at least once a year and that these papers be published in the Journal of our State Association and possibly also issued in the public press. *Thirdly:* That the County Societies, especially those in the larger counties, be asked to secure at least one address annually on this subject, to which the public shall be invited, those articles also to be published in the principal papers of the State. *Fourthly:* It seems desirable to your Committee, if this Association decides to take up this work on the lines herein suggested, that a small appropriation be provided for necessary expenses.

We would suggest, finally, that all papers shall be first submitted to the Committee for revision and approval and that they be published under the auspices of the State Association, individual names being withheld.

Respectfully submitted,

GEO. B. SWASEY,
F. H. JACKSON,
S. E. WEBBER.

On motion of Dr. Addison S. Thayer, duly seconded, it was voted that this report be accepted and referred to the Committee on Publication.

The following papers were read and discussed:—

"The Conservation of the Cardio-Vascular System," H. Augustus Milliken of Hallowell.

"School Hygiene and Medical Inspection of Schools," H. L. Putnam of Houlton.

"Ophthalmia Neonatorum," Albion H. Little of Portland.

"The Importance of an Early Diagnosis and Treatment of Cancer of the Uterus," E. V. Call of Lewiston.

"Diagnosis and Treatment of Cancer of the Breast," R. W. Wakefield of Bar Harbor.

On motion, duly seconded, it was voted to refer the papers of Dr. Call and Dr. Wakefield to the Committee on Publication.

On motion of Dr. Gordon, duly seconded, it was voted that the Committee on Cancer be continued.

On motion of Dr. Webber, duly seconded, it was voted that further discussion would be omitted.

On motion, duly seconded, it was voted to adjourn.

W. BEAN MOULTON, *Secretary*.

Necrology.

DANIEL HUGH KELLEY.

Dr. Daniel Hugh Kelley, a practitioner of high standing in Old Town and a faithful member of our association, died as far back as 1907, but as no notice of him has as yet appeared in our transactions, it is my duty to say something about his career.

Dr. Kelley was born in Milford, Maine, in 1855, but moved at an early age to Bangor, where his parents had found a new home. He was educated at private schools in Baltimore, Quebec and Toronto, and after completing his academic courses was a tutor for two years at Toronto. He then decided to study medicine and read in the office of Dr. D. A. Hennessey of Bangor and was graduated at the Medical school of the University of Vermont, in 1881.

He practiced first in Mattawamkeag and later on in Old Town, where he passed the remainder of his busy life. He served as pension examiner, did but little surgery but was a very capable medical practitioner. He died suddenly August 28, 1907.

He was a fine looking, sturdy man, with a genial and kindly disposition, which endeared him to his many friends. He was probably one of the best story tellers anywhere around and by this characteristic obtained and cured, many patients.

Whilst composing this notice, an old friend of mine happened to consult me and on mentioning that I was writing about Dr. Kelley of Old Town, she told me that her husband owed to this physician his good right hand which when other physicians had decided to amputate, Dr. Kelley said: "This is a poor boy, and will need that hand more than most men. Let us try to save it if we can." And he saved it, to the permanent gratitude of the man, his wife and his children.

J. A. S.

WILLIAM BUCK.

Although Dr. William Buck, once an active member amongst us, died three years since, nothing has been said concerning his career in Maine. A few words are nevertheless due to his memory and he shall have them from me. Dr. William Buck of Foxcroft (1833-1908) was born in Hodgdon, Maine, the son of Nathaniel Buck and Elizabeth Quail, his wife. Dr. Buck's father was a prominent lumber merchant in his days, and his son was consequently well educated. He studied medicine with two local practitioners of fame in their days, Drs. Joshua Jordan and Holmes of Foxcroft. Later on he was graduated at the Medical School of Maine in 1859, and practiced in Harmony two years. With the outbreak of the civil war he obtained a position as surgeon in a Maine regiment and did good service for three years. He then took a post-graduate course at Bellevue and settled in Foxcroft for life. He was for years the pension examiner for the district, combined for a long time the dispensing of drugs with his medical practice and was for over thirty years the trusted family physician of a large clientage of admiring patients and friends. He was a surgeon, on emergencies, but not a great one, steadily. His life was a long one of usefulness to the town, and exemplary to other generations following.

J. A. S.

ALONZO BISHOP ADAMS.

Of Dr. Alonzo Bishop Adams (1843-1910) of Wilton, in this State and a quiet, unobtrusive member of the Association, but little can be said from a medical point of view. He seems to have graduated at the Medical School of Maine, in 1869, some years after the Civil War. I know that he served as a soldier in the 16th Maine Volunteer Infantry, and from that it would seem that rather late in life he began the study of medicine, not graduating until his twenty-sixth year. His career in the army was successful, whilst in medicine it was the uneventful one of a country physician, highly considered by those who knew him well.

J. A. S.

JOURNAL OF MAINE MEDICAL ASSOCIATION

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Editorial Comment.

Economy of Health.

Abstract of Address before the Club, by Dr. Wiley.

At the December meeting of the Economic Club, the members were treated to a most instructive talk by Dr. Harvey W. Wiley, Chief Chemist in the United States Department of Agriculture. "Economy is the method of producing results with the least possible expenditure of Energy," says Dr. Wiley. Estimating that the average earning of an American citizen was about one thousand dollars per annum, this would represent at five per cent the interest on a capitalization of twenty thousand dollars per individual. This would give the value of the American nation a capitalization of about two trillion dollars, an almost incredible sum exceeding all other national assets. The illness of a single member of this community is thus equivalent to the putting out of business the sum of twenty thousand dollars. He reviewed the work of the government along the lines of conservation of forest lands, its control of the corporations, its protection of its citizens from diseases brought to its borders by immigration, its laws protecting live stock and its transportation and finally the corresponding low amount of work being done by the individual communities in the protection of its members from communicable diseases.

Looking back to the period immediately following his medical school days, while a student at Vienna, typhoid fever was a constant menace there and continued so until the government, recognizing the spread of the disease through the water supply, finally succeeded in obtaining an absolutely pure supply and from that time on the cases lessened until, at the present time the only ones found in Vienna are those brought within its borders by travellers. These are immediately cared for and never spread, from the primary source of infection.

The Russian and Japanese war taught the civilized race our first great lesson in the Economy of Health in that the invading army was preceded, not by engineers, scouts, etc., but by the chemist, the bacteriologist and the physician who examined all water supplies, placarding each supply, noting those which were pure, and placing dangerous signs over the infected waters. The Japanese army were placed on absolutely pure rations and had a generous supply, so that the roll of sick patients was reduced to a minimum and, in fact, nearly every soldier reported for duty regularly.

The history of the Civil War and still later, of the Spanish American War, has given us a most serious lesson in the study of the mortality due to infectious diseases which were wholly preventable. The lesson learned from the Russian army made possible the building of the Panama Canal by our own government, after France had failed. This was made possible only by sending into that infected territory the chemist, the bacteriologist and the physician. These experts found that the mosquito was the great carrier of infection and that it was bred in the surface of the waters throughout the Canal Zone. The first work done was making it possible for human beings to exist by resurfacing all bodies of water with oil, resulting in the death of mosquitoes and eliminating the breeding points so at the present time, Panama Canal is nearly completed and this infectious belt, where it was impossible for the white race to exist in the years gone by, is now one of the healthiest spots to be found.

The War Manœuvres along the Mexican border is another great example of the results of pure food and the enforcement of Protective Health Laws.

The one disease in our American cities taking the largest number of lives per year is tuberculosis and this is to a large extent curable in the incipient stage of the disease. It is as preventable in the United States as was typhoid in Vienna. Most States are awakening to the fact that some protection is needed and are providing sanatoriums for the treatment of the incipient cases but the fatal mistake in most communities is the leaving the chronic cases at large to infect their relatives and friends, in other words, where we are curing the small per cent of our incipient cases, we are leaving a large number of cases in the second and third stages who are constantly infecting their relatives and friends as well as being the source of infection to the community, in that, they have the same right to visit public institutions, theatres, travel in street railway cars and on all public conveyances.

Dr. Wiley strongly urges the necessity of the segregation of our chronic tubercular cases to prevent the spread of this disease. He believes that, in ten years the medical profession of this country

could completely stamp out tuberculosis if the government would give them the necessary power and money to work with. The mortality of this disease is enormous and death comes only after a year or two of unfitness for work. It is slow in its progress and the last period of a day laborer's life, infected with this disease, leaves him a subject of charity for his relatives, friends or of the community to care for.

The financial loss to the community through death from this disease is infinitely greater than any cost in its total eradication so that in discussing the economy of health of the individual we are nearing the solution of the economy of health in the community, in which the individual is a unit.

County, State and National Association Membership and Their Value.

Under the plan of reorganization, a physician practicing in the State of Maine must first join the County Medical Society of the county in which he resides in order to become a member of the State and National Medical Association.

His election to his county society gives him the right of membership to the State and national bodies but it is necessary for him to pay the annual dues to each to complete his membership. As to their relative value, membership in the county society, gives each member the privilege of attending the county meetings held at stated intervals during the year where the reading and discussion of papers, the reports of interesting cases, the discussion of matters pertaining to the better welfare of the profession in the county, together with a closer association with his own brother physicians should give good value in return for the annual dues.

The State society, at its annual session held in June of each year offers its members some twelve or fifteen papers for discussion, also the opportunity to renew the acquaintanceship of previous years. It also gives the members an opportunity to visit the hospitals in the vicinity of the meeting and obtain the advantage of clinical work being done. In addition to this the State society gives to its members a monthly medical magazine with a circulating medical library which will be accessible to all members.

If the defense fund is passed upon, the combined State and county societies can offer its members a larger value than it can possibly obtain in any other way even though it is necessary to increase our present dues two dollars to accomplish this result.

The membership in the National Association not only offers an extensive and well classified program of all things modern pertaining

to medicine, surgery and its specialties, but it offers its members an opportunity to visit the larger cities and to obtain ready access to the various medical institutions for the study of clinical work.

Apart from this, we have the leading weekly Medical Journal included in our membership together with ready access to all the reports of the various Committees on Investigation. It would be practically impossible to duplicate the above value outside of the membership to the above societies, whereas they are endeavoring to represent all that is good in medicine and surgery together with the most modern methods of practice. Any member in good standing in his profession should desire membership and cannot afford to be outside of his county society.

Oxidaze Tablets.

A special type of "consumption cure" humbug, consists essentially of ordinary cane sugar and some volatile oils. The nostrum has been sold by various individuals and under various names. Thus in 1907, a "consumption cure" was put on the market under the name "Hydrocine." Hydrocine, at first, was said to be a "hyper-oxidized hydro-carbon." It was analyzed by the Association's chemists, who reported that they found that "each 29.5 grain Hydrocine tablet contains 28 grains of cane sugar and small quantities of volatile oils and a trace of pancreatin." This preparation seems to have originated with a C. E. Getsinger who organized what was known as the Medical Food Company. The commercial possibilities in selling an odoriferous sugar mixture as a "consumption cure" apparently appealed to one Charles S. Roberts, a physician of Syracuse, N. Y., who, with the help of Charles H. Goddard and others, incorporated the Hydrocine Company for the purpose of exploiting Getsinger's "treatment." Goddard, it will be remembered, was the man who organized the co-operative "patent-medicine" concern known as the A. D. S.—American Drug-gists' Syndicate.

Getsinger and Roberts later seemed to have had a disagreement and Getsinger marketed his own product under the name of "Oxy-dase." Roberts changed the name of Hydrocine to "Oleozone" and apparently had the stuff made by the A. D. S. or at least it bore the same serial number as that given the A. D. S. products.

Coincident with these changes in the name of the "hyper-oxidized hydro-carbon" another concern came into existence—the Cowles Institute, said to be operated by one H. L. Cowles. This also dispensed "oxygenated products" for the cure of consumption. A little later Cowles seems to have changed the name of his concern to the Hema-

vitae Company and to have re-christened his product, "Hemavitae."

The latest change in the name of Getsinger's product is "Oxidaze," put out by the American Oxidaze Company. This company claims to have purchased the formula of Getsinger who is no longer connected with the business.

The Oxidaze concern sells its product direct to the public. The nostrum is recommended for tuberculosis, pneumonia, asthma, bronchitis, catarrh, laryngitis, whooping cough, etc., and this evil smelling mixture is said "to fortify the body against the invasion of all germs or infection of whatever name or nature."

In order that health authorities might be in a position to protect the public against this nostrum the chemical laboratory of the A. M. A. has determined the composition of the product as now sold. From the analysis it appears that the specimen of Oxidaze Tablets consists essentially of sugar containing a small amount of volatile oils, starch and a trace of potassium iodid.

Book Reviews.

A Text-Book of Medical Diagnosis.

By James M. Anders, M. D., Professor of the Theory and Practice of Medicine and of Clinical Medicine, and L. Napoleon Boston, M. D., Adjunct Professor of Medicine, Medico-Chirurgical College, Philadelphia. Octave of 1,195 pages, with 443 illustrations, 17 in colors. Philadelphia and London: W. B. Saunders Company, 1911. Cloth, \$6.00 net; half morocco, \$7.50 net. W. B. Saunders Company, Philadelphia and New York.

The authors have produced a very complete and exhaustive treatise on Medical Diagnosis, contained in a volume of nearly one thousand, two hundred pages, profusely illustrated with excellent photographs, cuts and colored plates. The effort of the writers, namely: "to furnish an improved method of determining the clinical features of disease" has been well met, and the essential and important data both from clinical and laboratory investigation have been set before the reader in a very concise and practical manner, facilitating a rapid survey of the subject.

The new features which are especially recommended, and which are justly deserving of commendation are, the brief pathologic definitions of the diseases, the excellent illustrative case histories selected from material personally observed by the authors, and the many diagnostic tables, by which differential diagnosis is greatly facilitated. The writers also present under each disease a summary of the diag-

nostic features and laboratory findings, which is very helpful. An extended use is made of diagrams illustrating normal and pathological conditions in the organs of the chest and abdomen.

All the newer methods of laboratory technique are illustrated wherever practical by the means of photographs and cuts, which add much to the readiness with which the reader may grasp the subject. The use of the X-ray for diagnostic purposes is made prominent by many excellent radiographs of abnormalities of the thoracic and abdominal organs, accompanied by excellent descriptions and comment by George E. Pfahler, M. D.

The systematic arrangement of the text in dealing with each disease serves well for didactic purposes, and is of material aid in fixing essential details in the mind of the reader. Wherever the laboratory diagnosis is a great value it is given considerable space, as for instance, in diseases of the blood, stomach, intestines, kidneys, etc., but on the other hand, when the laboratory findings are of little practical value they receive scant space.

The section on Diseases of the Nervous System comprises nearly two hundred pages, and is prepared by T. H. Weisenberg, M. D. It follows the same general scheme of arrangement of matter used in the rest of the book, and presents a concise discussion of the diseases of the nervous system.

Altogether this new volume on Medical Diagnosis commends itself strongly to the student and practitioner as a storehouse of diagnostic data, which are, moreover, most easy of access, and therefore of all the more practical value.

T. J. B.

One Hundred Surgical Problems.

(Mumford)

To say that any one book is the best he has ever read on a certain topic necessarily brings in the factor of the individual taste of the reviewer. At any rate, he may say he has seen no more instructive and never before so readable a book on surgical diagnosis as that written by Dr. J. G. Mumford of Boston and so well named "One Hundred Surgical Problems." The tired surgeon who, in his evening hour of relaxation, would most often shun the more ponderous surgical work, can pick up this little book and run over a few problems in surgery as interesting as the best short story of the current magazine. The style is delightful and the cases excellently chosen.

One point stands out as illustrative of the trend of the times among our best city practitioners, that is, the tendency of Dr. Mumford to call in to help solve his problems all the aid possible, the specialist, the internist, the bacteriologist, and very often the trained anaesthetic.

In case 96 it is the bacteriologist who makes possible a different diagnosis and in case 76, it is the anaesthetic who is the great factor in saving life.

We urge that the general practitioner in buying the "Case History" series will not omit this book of Dr. Mumford's, for it seems to us that to the general practitioner the book is most instructive. P. P. T.

Case Histories in Neurology. A Work on Neurology.

By Dr. E. W. Taylor, Instructor in this branch of medicine in the Harvard Medical School has recently been published by W. M. Leonard.

Dr. Taylor presents his book in the form of Case Histories, which seems to be popular at the present time with Boston medical authors, though it originated with that eminent educator and writer, Walter Bradford Cannon.

The case history method possesses undoubted merit; to the one seeking information it more nearly approaches actual clinical experience than the ordinary text book style.

Dr. Taylor's treatment of various forms of nervous diseases with reference to their anatomical seat while by no means ideal is perhaps on the whole the most satisfactory method yet devised.

The case history method allows the reader to profit by occasional mistakes in diagnosis which is illustrated strongly in several instances in Dr. Taylor's work.

Some valuable diagnostic points are thus emphasized when an early diagnosis was incorrect.

This is one of the most instructive features of this method—the record of an error in diagnosis by an intelligent and careful observer of symptoms is often of greater value than the recital of all the diagnostic signs of a classical case.

One regrets so little space is allotted to treatment in Dr. Taylor's book but it is perhaps all that could be expected in a work of this kind, the manifest purpose of which is to define more clearly the actual underlying condition in each case.

P. H. S. V.

NOTICE.

Examination of Dentists for the U. S. Army.

The Surgeon General of the army announces that examinations for the appointment of Acting Dental Surgeons will be held at Fort Slocum, New York; Columbus Barracks, Ohio; Jefferson Barracks, Missouri; Fort Logan, Colorado; and Fort McDowell, California, on Monday, April 1, 1912.

Application blanks and full information concerning these examinations can be procured by addressing the "Surgeon General, U. S. Army, Washington, D. C."

Abstracts of Current Literature.

UNDER THE CHARGE OF THE MEDICAL REVIEW CLUB
OF PORTLAND.

The Anatomy of Spinal Puncture with Some Considerations on Technic and Paralytic Sequels.

By William C. Lusk, M. D., of New York.

The writer presents his findings in fifteen dissections of the spinal cord, with the object of determining a site of greatest safety for tapping the subarachnoid space. He establishes first several anatomical facts. He finds the conus medullaris or lower end of the cord proper to be usually at the first lumbar vertebra, though it may extend to the second (in children Quinke says it extends lower than in adults, to the third and even to the fourth).

Of the membranes of the cord, the dura or outer membrane surrounds the arachnoid as two adjacent pleural surfaces but the relation of the arachnoid to the underlying cord and nerve structures varies. In the majority of his dissections the writer found that while through cervical and dorsal regions there was a subarachnoid space anterior to the cord, in the majority of cases the arachnoid membrane posteriorly was adherent to the cord itself totally or in part from the conus to the neck region. He therefore states that if cerebro-spinal fluid can be constantly drawn as a result of measal puncture at or above the level of the conus, in many instances the substance of the cord must be traversed by the needle and fluid taken from the anterior portion of the subarachnoid space. His conclusion is that the only vertebral interspaces through which spinal puncture can be made with the practical assurance that nerve structures will not be penetrated are the fourth lumbar and lumbo-sacral, preferably the former. The usual depth of lumbar puncture is 4 to 6 cm. though in muscular and fat people it may be 7 to 10 cm. The depth is less in the lumbo-sacral than in the lumbar interspaces.

TECHNIC OF PUNCTURE. The needle should be made of platinum or pure nickel with a diameter of about 1 mm. The moderately blunt needle gives greater perception to the sense of touch and is less likely to cause injury to any nerves it may meet. The needle should be provided with an opturator which exactly fits the point. The point should be short and oblique to insure its complete entrance into the subarachnoid space.

POSTURE OF PATIENT. This should be such that the pelvis be tilted sufficiently backward to relax the sacral nerve roots. This is

attained in either the erect position or the lateral position with the dependent thigh straightened and the leg and thigh of the opposite side flexed until the foot of this side rests upon the knee of the dependent extremity.

A short longitudinal stab wound of the skin should be made at the site of entrance of the needle. This prevents the skin binding the shaft of the needle and avoids the danger of contamination of the needle by bacteria of the skin.

THE POINT FOR PUNCTURE. The exact point chosen for puncture may be in the mid dorsal line or just lateral to it. In performing median puncture it is to be remembered that a tubercle projects downward from the lower margin of the lumbar spinous process, and to avoid encountering it the needle should be made to follow as closely as possible the upper border of the lower spinous process of the space through which it is passed. The writer prefers the slightly lateral route of entrance with mesial puncture of the theca, and proceeds as follows: the needle is entered one-fourth inch lateral to the middle line of the back and pushed straight forward about one and a half to two inches until it meets the resistance of the spinal column, or lig. Subflavum. Then it should be slightly withdrawn until its point lies free in the muscle and from this latter position it is given its direction toward the posterior median line of the spinal theca by inclining it at an angle of about five degrees with the median sagittal plane. It may be necessary to incline the needle a bit more and work the point upward but usually it slips in easily.

In using a spinal anaesthetic, the solution should never be injected before the liquor flows out clear and in quickly following drops.

The writer cites in detail the reported cases of the paralytic sequels of lumbar puncture and shows that they are comparatively infrequent with proper technic.

PHILIP P. THOMPSON.

(Therapeutic Gazette, Nov. 15, 1911.)

Dr. Deforest Willard of Philadelphia presents an article on the use of Bismuth Vaseline paste in the treatment of chronic sinuses in which he shows that the method is very simple, that the dangers are few, and that no other non-operative treatment has ever given so satisfactory results. It is interesting to note that in the same issue of this magazine there is an abstract from an article that appeared in the Journal of the American Medical Association the author of which maintains that the same results may be obtained from the use of a chalk paste as from the Bismuth paste, and without the dangers of poisoning inherent in the use of the Bismuth paste, as shown by a case in his own practice.

Drs. Karl and Silvio Von Ruch present a study of two hundred and ninety-two cases of Pulmonary Tuberculosis treated and discharged from a sanitarium. They take up very carefully the classification of cases as regards signs, and make a complete analysis of the tuberculous and non-tuberculous complications of the disease. Their use of Tincture of Green soap applied with friction for the aid to absorption of pleural exudates and for enlarged glands is particularly noticed, the curative effect of this measure being ascribed by them to the absorption of the contained alkali rather than to the friction. The writers have been persistent users of Tuberculin since its introduction in 1890, and in its use they have superceded the use of the opsonic index by the tracing of the precipitin curve, as being less intricate and more accurate. They promise by the first of the year to introduce to the profession a new Tuberculin, much stronger than any other preparation, with which by a single dose prophylactic vaccination from Tuberculosis may be secured.

HAROLD J. EVERETT.

(N. Y. Medical Journal, Nov. 11, 1911.)

Combined Therapy in Pulmonary Tuberculosis.

By Geo. Sanders, M. D., New York.

The author says, "The use of the combined vaccines in the treatment of pulmonary tuberculosis has shown such gratifying results that the further use of the same is urgently suggested.

The combined vaccines consist of the following:

Streptococcus, multivalent	50,000,000
Staphylococcus, "	500,000,000
Colon, "	200,000,000

To each cubic centimetre vial.

One-half of this quantity is injected hypodermically into any portion of the body. Used every other day, from four to ten injections seem to bring definite results.

The author reports two cases and the results are surely promising.

The author's conclusions are that the prostration, night sweats, fever and debilitating condition of a patient suffering from pulmonary tuberculosis, are considered to be due to a secondary infection, and by mitigating or removing the secondary infection, thereby increasing the vitality of the patient and also his resisting powers, we may accomplish a rapid cure of the tuberculosis.

F. W. L.

County News.

CUMBERLAND.

PORTLAND MEDICAL CLUB.

The Portland Medical Club held its first meeting for 1912 at the Columbia Hotel, January 4th, thirty-one members and two visitors being present.

The report of the Treasurer for 1911 was accepted. The resignations of Dr. W. W. Reno and Dr. W. P. Hutchins were read and accepted, and it was voted that Dr Reno's name be added to the list of Honorary members.

Dr. Geer reported a case of "Tetanus" and Dr. Patterson reported a case of twin pregnancy, one child being anacephalic.

Dr. Fisher reported a case of "Continued Hemorrhage from Lateral Sinus after a Mastoid Operation."

The paper of the evening was by Dr. J. A. Spalding, subject, "Salvarsan and the Eye." He cited three interesting cases from his practice where there had been neurotrophic affections of the auditory or optic nerves following this use. He strongly advocated the intravenous method of administration and gave details of the technique.

Major Church of Fort Williams gave a very instructive talk on his experience with Salvarsan in thirty-eight cases.

PHILIP P. THOMPSON,

Secretary, Pro tem.

ANDROSCOGGIN.

The Androscoggin County Medical Society started off the new year properly, last evening, by holding one of the most enthusiastic and profitable sessions since its organization. Plans were put under way which will result in a convention of three medical associations in this city.

Three papers were given during the evening, all of them of more than ordinary interest and importance. Dr. William Ness spoke on chicken pox and vaccination; Dr. J. A. Dupras on smallpox and Dr. D. A. Barrell on disinfection and fumigation.

Dr. J. W. Scannell, as secretary of the society, was authorized to confer with Dr H. L. Bartlett of Norway, secretary of the Oxford County Medical Society, and with Dr. D. L. Pratt of Farmington, secretary of the society in Franklin County, with the end in view of the holding in Lewiston of a joint convention of these three societies.

The secretaries will confer in the near future and will arrange the time, place and details of the meeting.

Secretary Scannell read a letter from Dr. John B. Murphy, telling of the work being done in Washington in regard to hygiene and a quarantine, and suggesting many changes in the work of the National Health authorities.

Dr. E. B. Buker of New Auburn, and Dr. L. P. Gerrish of Lisbon Falls, were admitted to membership

Those present were Doctors E. V. Call, J. W. Scannell, J. A. Donovan, A. M. Garcelon, E. F. Pierce, F. E. Sleeper, J. A. Dupras, W. W. Bolster, H. E. E. Stevens, A. W. Plummer and L. P. Gerrish of Lisbon Falls, W. E. Webber, H. L. Irish, H. W. Garcelon, E. B. Buker, R. A. Shields, E. S. Cummings, William Ness, D. A. Barrell, B. G. W. Cushman and W. J. Fahey.

J. W. SCANNELL, *Secretary*.

AROOSTOOK.

Aroostook County Medical Society held its semi-annual meeting in the Mooseleuk Club Rooms at Presque Isle, January 16, 1912.

In spite of the weather and delayed trains, over half of the membership was present.

President F. W. Mann called the meeting to order.

A Committee was appointed to get up a uniform rate schedule and submit to the annual meeting. The members of this Committee are Dr. Putnam, Houlton; Dr. Kilburn, Presque Isle; Dr. Libby, Smyrna.

The program of the meeting was as follows:

Dr. F. W. Mitchell of Houlton read a paper on "Headaches."

Dr. W. E. Sincock of Caribou read a paper, "The Country Doctor as a Surgeon."

Dr. Wm. C. Peters of Bangor came to Aroostook to favor us with a paper on "Fracture in the Region of the Joints."

All papers were freely discussed and every one felt more than repaid for turning out.

Dr. Frank H. Jackson of Houlton was appointed to represent this Society on the Committee work.

W. G. CHAMBERLAIN, *Secretary*.

KENNEBEC.

WATERVILLE CLINICAL SOCIETY.

The regular meeting of the Waterville Clinical Society was held at the City Hall on Monday evening, January 22nd.

The paper of the evening entitled "Mistaken Diagnosis in Abdominal Cases" was read by Dr. T. E. Hardy.

DR. EDSON E. GOODRICH, *Secretary*.

The January meeting of the Augusta Medical Club was held Monday evening, January 8th at Weaver's restaurant. Dr. Roland L. McKay entertained. The President, Dr. R. H. Stubbs, occupied the chair. The committee appointed at the previous meeting reported that they had consulted with the merchants of Augusta, relative to the open display of food upon the street. They found the merchants willing to co-operate with them in order to stop the practice of exposing the food, and they anticipated favorable action as the result of their suggestions.

The paper of the evening on "Some considerations concerning Abortion" was read by Dr. W. H. Harris. The reader discussed the cause and treatment of abortion in a very practical and thoughtful paper. A general discussion followed. Seventeen members were present.

H. W. MILLER, *Secretary*.

PISCATAQUIS.

The Piscataquis County Medical Society held its annual meeting at Dover, Thursday evening, January 25. The following officers were elected for the ensuing year: President, M. O. Brow; Vice President, C. C. Hall, Jr.; Secretary, R. H. Marsh; Treasurer, E. D. Merrill; Member of Board of Censors, C. C. Hall; Delegate to Maine Medical Association, C. W. Ray. Dr. C. C. Hall of Dover was appointed committee to confer with the committee appointed by the Maine Medical Association to investigate and recommend action on questions of vital interest to the medical profession.

A. H. Stanhope read a paper on "Morbid Anatomy and Treatment of Appendicitis;" after general discussion, it was followed by a paper by C. C. Hall, Jr., on "Transmission of Heart Murmurs."

YORK.

The annual and sixty-seventh quarterly meeting of the York County Medical Society was held in the city building, Biddeford, Thursday, January 11th. Dr. F. E. Small of Biddeford, President, presided at the forenoon session, which was opened at 11.30 o'clock. The minutes of the October meeting were read and approved. The report of the Treasurer, Dr. L. E. Willard of Saco, was read and accepted. It was voted that Dr. H. H. Purington of Kennebunk should present a paper at the next meeting in April. It was voted to pay certain bills that were presented.

Dr. B. M. Moulton of Springvale was elected a member of this Society.

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In practice it is markedly utilizable, and is reliably stable. It is effective as a food-fat and possesses superior characteristics.

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Sample sent to physicians on request.

Drs. J. D. Haley, C. E. Thompson, Saco, and F. H. Hobbs, Waterboro, were appointed by the President as a committee to nominate officers for the present year. They reported as follows:—President, Dr. E. C. Cook, York; Vice President, Dr. L. E. Willard, Saco; Secretary, Dr. A. L. Jones, Old Orchard; Treasurer, Dr. C. F. Traynor, Biddeford. Delegates to State Convention—Dr. J. O. McCarrison, No. Berwick, Dr. J. M. O'Connor, Biddeford; Censor for three years, Dr. C. W. Pillsbury, Saco. These nominees were elected.

The meeting was adjourned until 2 P. M. and an enjoyable dinner was provided at Hotel Thacher.

Dr. Cook presided at the afternoon session and introduced Dr. Frank Y. Gilbert of Portland, as the guest of the society and the principal speaker of the day. Dr. Gilbert gave a highly entertaining and valuable address on "Mastoid Disease," including the radical operation, with several excellent photographic illustrations and interesting case reports. A general discussion of the subject followed, and many good suggestions were forthcoming. On motion of Dr. L. L. Powell of Saco, the society extended a rising vote of thanks to Dr. Gilbert for his able and courteous services.

The applications for membership of two physicians were referred to the Board of Censors. On motion of Dr. D. E. Dolloff of Biddeford it was voted that a committee of three be appointed by the President to present resolutions on the death of Dr. C. J. Baillargeon, late of Sanford. Drs. Dolloff, C. W. Blagden of Sanford and B. M. Moulton of Springvale constitute this committee.

During the closing minutes of the meeting, Dr. Gilbert spoke briefly in relation to the Medical Defence Fund, Contract Medical

work in lodges, the Journal of the Maine Medical Association and the Maine Medical Library.

The following were present at the meeting and banquet — Drs. J. O. McCarrison, No. Berwick; H. H. Purington, Kennebunk; E. C. Cook, York; F. H. Hobbs, Waterboro; H. L. Prescott, Kennebunkport; B. F. Wentworth, Scarboro; C. W. Blagden, D. W. Wentworth, Sanford; B. M. Moulton, Springvale; W. W. Smith, Ogunquit; J. D. Haley, C. E. Thompson, L. E. Willard, L. L. Powell, Saco; M. H. Ferguson, E. D. O'Neill, F. L. Davis, F. E. Small, J. M. O'Connor, H. W. Hunt, D. E. Dolloff, C. F. Kendall, P. S. Hill, G. C. Precourt, C. F. Traynor, A. C. Maynard, L. A. Girard, J. D. Butler, Biddeford; F. Y. Gilbert, H. F. Twitchell, Portland; J. A. Randall, A. L. Jones, Old Orchard.

ARTHUR L. JONES, *Secretary*.

PERSONAL NEWS AND NOTES.

Dr. Johnson of Machias was recently called to Portland on account of the illness and death of his sister.

The offices of Dr. M. W. Besse of Waterville were destroyed by fire.

Dr. Philip W. Davis of Portland who broke his arm while cranking his automobile, is making a good recovery.

Dr. Charles O. Caswell of Portland, late House Surgeon in the Orthopedic department of the Massachusetts General Hospital, Boston, Mass., announces that he will confine his practice to Orthopedic surgery.

Dr. B. P. Hurd, formerly of Thorndike, having spent some time in New York, taking post graduate work in Dermatology and Genito-Urinary Medical Surgery, has located in Waterville, where he is doing special work along those lines.

Dr. Gould, who was engaged in practice in Surry for the past several years has recently opened an office in Presque Isle.

Dr. Nash of Jefferson, was recently married to Miss Embleton, who was a graduate of the Maine General Hospital.

We regret to note the death of Dr. Wheeler, who has been a resident of Portland for some few years past. He was a retired army surgeon and for the last years of his life has been very active in Board of Trade work, also maintaining an interest in his profession.

Dr. H. D. Averill, who for many years was leading physician in Bar Harbor, died at Steuben, January 13, 1912.

Dr. J. H. Wilson of Cambridge, who has been confined in the house since last May has so far recovered as to be able to attend to office work and calls about the village.

A Manual of Materia Medica.

By E. Quin Thornton, M. D., Assistant Professor of Materia Medica in the Jefferson Medical College, Philadelphia. Octavo, 525 pages. Cloth, \$3.50 net. Lea & Febiger, Philadelphia and New York, 1911.

Professor Thornton, after much practical experience in the classroom, has produced an eminently teachable book. *Materia Medica* he rightly regards as the foundation of Therapeutics; without encroaching on the superstructure, he keeps resolutely on his own ground: the salient and essential facts he groups skillfully and presents in bold relief; with unsparing hand he discards the irrelevant; and has no hesitation in reserving for the courses in Therapeutics extended discussion of physiological and medical uses. In statement and discussion, his style is clear and precise. To aid the memory by appeal to the eye, to offset the unfortunate impossibility of pictorial illustration, great attention has been paid to the typographical appearance of the book.

By the introduction of varied type, the judicious use of italics and careful paragraph structure and division, emphasis, color and perspective are secured according to the importance of the facts under presentation. Obviously Professor Thornton has not neglected the more recent monographs on the "psychology of the printed page."

He opens with a section on posology, prescription writing, including its Latin essentials, incompatibilities, weights and measures, and then proceeds to the body of the book, which is devoted to the description of all drugs, chemicals and preparations official in the U. S. Pharmacopœia. In the third and closing part, he gives a complete list of these preparations, re-arranged according to pharmaceutical classes, with their composition and methods of preparation, thereby affording a laboratory guide.

The important section on prescription writing is especially luminous and compact, and the resume of the *rudimenta latina*, a somewhat unique feature of this book, will be welcomed even by those, who, in their preparation for the study of medicine, have not sacrificed the ideals of classical culture to the utilitarian pretense of some betrumpered "scientific course."

L. A. D.

FOR SALE The complete X-Ray machine which belonged to the late Dr. Wallace K. Oakes, of Auburn, will be sold at a bargain. Write to Dr. C. A. Barrell, 60 High St., Auburn, Me., for particulars

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The Journal assumes no responsibility for opinions expressed by the authors.

VOL. II.

MARCH, 1912.

No. 8

THE OCCUPATIONAL DISEASES OF MODERN LIFE.*

BY W. GILMAN THOMPSON, M. D.

Professor of Medicine, Cornell University Medical College, in New York City.

Under the terms "Occupational Diseases," "Maladies of Professions," "Industrial Diseases," "Diseases of Dangerous Trades," or "Diseases of Environment," are grouped an interesting variety of diseases incident to modern modes of life which are becoming of increasing importance alike from the humanitarian, scientific and purely commercial points of view.

In this country it is only within a very short time that any collective or authoritative study has been made of the occupational diseases or has any comprehensive and restrictive legislation been suggested to mitigate their manifold evils such as were shown by the result of the recent Diamond Match Congressional investigation, which excited such widespread interest.

Thus far six States—California, Michigan, Wisconsin, New York, Connecticut and Illinois—have passed recent laws whereby physicians are required to report certain cases of occupational diseases, when found. These diseases are derived from four metals, lead, mercury, arsenic and phosphorus, one germ, the anthrax bacillus and the caisson disease. The reports must be made either to the State Board of

*Read before the Annual Meeting of the Cumberland County Medical Society, in Portland, Me., December 8, 1911.

Health as in four States, or the State Labor Bureau as in two States. Penalties varying from \$10 to \$100 are imposed for failure to report. The object of the reporting is to gain more accurate data upon which legislation may be based to mitigate the evils of unhygienic mills, factories, etc., or lessen the obvious hazards of certain trades.

The Census Bureau has lately issued a partial classification of one hundred and one diseases of hazardous occupations under which death returns or other statistics should be grouped. The States of Illinois and New York have established special commissions to investigate the problems of the occupational diseases in greater detail. Dr. Alice Hamilton, working for the Commission in Illinois, found cases of lead poisoning in thirty-three out of fifty-six establishments where lead was used in manufacture, and there was a yearly average of 665 cases of plumbism.

June, 1910, was signalized by the meeting in Chicago, of the first National Conference on Industrial Diseases and in a memorial sent to President Taft by this Conference, it was stated that there occur annually in the United States, thirteen million four hundred thousand cases of sickness among artisans and craftsmen, many of which are attributed to occupation hazards, involving a total annual economic loss of nearly three-fourths of a billion dollars. It is high time, therefore, that physicians bestir themselves to look carefully into the problems involved and aid in gathering accurate data, in order clearly to differentiate the influence of occupational environment and hazard in special lines of work.

In New York City is a small but most instructive Museum of Safety, where models and illustrations are gathered of appliances for prevention of accidents to workingmen, and within the year, this museum has begun a collection to illustrate the causes of occupational diseases as well, such for example, as samples of the dust inhaled by the grinders of meerscham pipes, makers of files, etc. In Europe, there are fourteen such museums in various large cities where hazardous trades abound.

In foreign countries, notably in Germany and England, much progress has been made and Employers' Liability Acts, in many instances, cover pecuniary responsibility for diseases acquired through dangerous trades. In England, in a single year, damages were awarded in over two thousand cases of occupational disease, arising from ten hazardous substances enumerated by Parliamentary act.

But to Italy belongs the credit of establishing the first and thus far the only hospital for the exclusive study and treatment of the industrial diseases. In Milan, side by side with one of the oldest hospitals in use, which was founded in 1456 and in which I have seen

priests and nuns more in evidence than the house staff in the wards, is this newest of all developments of preventive medicine. This hospital, which contains one hundred and fifty beds, is fitted with chemical, biological and pathological laboratories, besides an elaborate X-Ray plant, ergographs, pneumatic cabinets, microspectroscopes, electrocardiographs, and photographic appliances besides an auditorium for clinical instruction and pathological demonstrations.

The literature of the occupational diseases thus far is very meagre and not very practical, and consists principally of a few foreign monographs, a few scattered journal articles and two or three books such as those by Arlidge, Sinclair White, Thomas Oliver and W. J. Green. Much remains to be done in the work of systematic description of the increasingly numerous diseases of this type. As a basis of study, I submit the following classification which I arranged for the New York State Department of Labor to distribute to the physicians of the State, with the notification blanks.

SPECIAL OCCUPATION HAZARDS AND HARMFUL SUBSTANCES.

Such are Derived from I. Metals. II. Dusts. III. Gases, Vapors and Fumes. IV. Injuries to Nerves and Muscles. V. Injuries to the Eyes. VI. Injuries to the Skin. VII. Compressed Air.

I. METAL POISONING is derived from filings, dusts and fumes of metals or their salts, which enter the system through inhalation or swallowing, being conveyed to the mouth often by unclean hands, chewing tobacco or food eaten in dusty work-shops.

Poisonous or irritating metals include: antimony; arsenic; brass; copper; iron or steel; lead; manganese; mercury; phosphorus; silver; tin; zinc; bronze powders; lead or solder; or compounds of any of these substances. Special attention should be given to reporting diseases of the bones due to mercury, chromic acid, etc.

II. DUSTS cause irritation of all the respiratory passages and of the eyes and skin. In some instances the metal dusts enter the mouth as well as the lungs and are swallowed and absorbed. Irritating dusts are of three classes:

(a) *Insoluble Inorganic Dusts* (irritating the respiratory passages) flint; silica; sand, (e. g. sand blasts, sand paper); carbon, (e. g. coal, soot); brick dust; marble; granite; terra cotta; cement; asphalt; enamel; glass; quartz; lime, (e. g. gypsum, plaster); meerschaum; phosphates, (e. g. fertilizers); guano; emery; diamond dust; metal filings, (e. g. lead, brass, iron and steel, etc.); pumice; ashes.

(b) *Soluble Inorganic Dusts*: (Liable to be swallowed and absorbed); soluble arsenic, mercury, lead and silver compounds; metal filings of lead, brass and zinc.

(c) *Organic Dusts* and fibres arising from handling or manufacture of wood, bone and shell; from fur, skins, hides and leather; feathers; brooms and straw; flour and grain; jute; flax (linen); hemp; cotton; wool, (worsted, etc.); tobacco; felts; carpets; rags and paper; horsehair; street sweepings.

III. GASES, VAPORS AND FUMES irritate the respiratory passages and eyes and may cause poison by absorption. The most important are: illuminating gas (oil gas); gases from coke and coal; coal gas; carbon dioxide, (brewers' vats, bakers' ovens, aerated waters), chromic acid; *mineral acids*, sulphuric, hydrochloric, nitric, etc. (acid factory workers, engravers, etchers and lithographers); mercury cyanid; *heated lead*; ammonia; ammonium carbonate, ammonium chlorid; *tar and creosote* (distillers); *asphalt* and petroleum products (naphtha, benzine, gasolene—used in dry cleaning and otherwise), *wood alcohol*; *smoke* (firemen, varnish makers, varnishers); arsenuretted hydrogen, (copper refiners); ferro-silicon; *amyl alcohol*; dinitrobenzol; *nitroglycerine*; cordite; *carbon disulphide*; *chlorine*; chloride of lime; carbonyl chlorid; phosgene, (dyeing industry); *formaldehyd*; hydrofluoric acid; hydrocyanic acid; ammonium, sodium and potassium cyanids; pyridine; sulphur and *sulphuretted hydrogen*; *aniline*; dinitrobenzene and dinitrotoluene vapors.

IV. INJURIES TO NERVES AND MUSCLES are derived from occupational strain, fatigue, repeated blows and vibrations, excessive pressure, repeated muscular contractions, faulty positions, as in standing, sitting, leaning over benches, etc. The so-called "Occupation Neuroses" are comprised under this class of injury and disease. The principal effects of nerve or muscle strain are observed as: palsy, cramps, (writer's, telegrapher's, type-writer's) sciatica, neuritis, neuralgia, tremors, vaso-motor disorders, gastric and intestinal disorders, general "nervousness" and insomnia; deformities of chest from cramped positions (as in tailors); curvature of spine, flat foot, etc.

V. INJURIES TO THE EYES: Excessive light causes eye strain to electric light men, X-Ray workers, steel foundrymen, etc., and excessive heat subjects puddlers, glass workers and others to optic neuritis, conjunctivitis, etc. Dusts of various kinds irritate the eyelids or injure the eyeball.

VI. INJURIES TO THE SKIN are caused by acids, corrosive alkalis, lime, irritating dusts, tar, creosote and petroleum products, especially paraffine, dyes, etc. They give rise to eczema, fissures, ulcers, boils, epithelioma, etc.

VII. COMPRESSED AIR affects caisson men and divers. The former are subject to cramps, paralysis and serious lesions of the spinal cord, which sometimes prove fatal.

In the condensed review which follows, I shall only deal with a few of the more important and a few of the least appreciated of the occupational diseases.

First, as to conditions affecting the respiratory system. These chiefly act through mechanical irritation of the respiratory passages, or by evolving noxious gases or vapors, interfere with normal oxidation processes. Hence, from the former arise, pneumokoniosis, chronic bronchial catarrh, coryza, asthma and emphysema, with special predisposition to subsequent acquisition of tuberculosis and pneumonia. From the latter, the inhalation of toxic fumes, arise anemia, digestive disorders, and, in some cases, acute symptoms of specific poisoning, involving the circulation and central nervous system.

HARMFUL DUSTS.

The number of specific or occupational dusts is very great, but they are principally of three sorts: (a) the hard, sharp, mineral dusts of such substances as steel, silica, emery, glass, etc., which especially tend to cause cirrhosis of the lung or pneumokoniosis. (b) Certain hard but soluble metal dusts, such as lead filings which may enter the mouth, become absorbed and give rise to other than pulmonary symptoms. (c) The softer, lighter organic dusts such as are inhaled in grain elevators, flour mills, woolen and cotton mills, etc., which are prone to excite bronchial catarrhs and pulmonary abscess.

Workers in cement grinding and all forms of metal grinding, such as that of scissors, needles, knives, diamond and glass cutters, pottery polishers and workers in a host of similar trades, are rarely without chronic bronchitis and pulmonary cirrhosis. They readily take cold, and if they acquire pneumonia or tuberculosis present very little resisting power. Their death rate from tuberculosis, after a few consecutive years of employment, has been shown to be usually double and sometimes treble the ordinary mortality from that disease.

In the manufacture of high-class porcelain at Limoges, France, various special processes are most injurious to the men and women employed. The plates, cups, saucers, etc., after molding, are placed in burnt clay boxes for firing and separated from adhering to each other by ground flint. On removal from the ovens, the ware is brushed or "scoured" as the process is called and fine angular particles of flint may be inhaled. Among such operatives the death rate from both pneumonia and phthisis (or "potter's rot") is exceedingly high, and the

men who press the moistened clay suffer much from bronchitis. Dr. Lemaitre analyzed the dust in one of the large potteries and found particles of earth, granite, flint, carbon-soot, fragments of wood charcoal and dried glaze. This dust, he estimated, contained over six hundred million particles to the cubic yard of air. Obviously no ordinary ventilation can render such air fit to breathe and strong blow-fans and suction drafts should be used, and respiration valve masks should be worn by compulsion.

Dr. T. M. Prudden took a magnet into the Manhattan subway and passed it along the window sills in one of the cars. A large quantity of iron dust was thus gathered which proved to be derived from the attrition of the malleable iron car wheels against the steel brakes. From the wear upon the brakes and wheels, it has been shown by Mr. Soper that a ton a mile a month of iron dust is thus distributed throughout the tubes, some of which is blown into the cars by the rush of the trains. As yet, however, the motormen and guards who spend so many hours in the tubes, and the track walkers, do not appear to have suffered especially from respiratory diseases as it was at first thought they would. Street sweepers and ashmen also inhale much silica, asphalt and other dust, but its effects, owing to their being constantly in the open air, are less injurious than might be supposed. Dr. John Rogers, a few years ago, while physician to the New York Street Cleaning Department examined several hundred of the sweepers, but found no more of them tuberculous than a similar number of men in other less dusty occupations, but many of them had chronic bronchitis. Of course, the effects of chronic alcoholism and arteriosclerosis must be reckoned with in estimating the hazards of this, as well as of many other occupations.

The lighter forms of dust, unlike the carbon inhaled by the coal miner, are not likely to be conveyed to the bronchial glands and even the liver by phagocytes, nor do they penetrate very deeply into the lung. But apart from the chronic irritation of the bronchi maintained among workers in horse-hair, feathers, tobacco, leather, skins, paper, and workmen in mills of numerous types, such workmen, when they first enter upon their tasks, usually suffer from acute attacks with the symptoms of sneezing, coughing, fever, lassitude and pains in the eyes and head. In Lancashire, in some years the deaths from tuberculosis of cotton weavers have risen as high as twenty per cent of the total deaths from that disease, i. e., one man in five who died of tuberculosis was a weaver. A form of cutaneous irritation from dust recently came to my notice where one would least expect it, in a soap factory. One of my friends who visited the works was seized with violent sneezing and coughing and he also noticed that

the several hundred girls employed all had their hair encased in paper bags. The type of soap here manufactured was mixed with a finely powdered earth containing silica and the spiculæ of microscopic fossil animalculæ. The operatives become accustomed to the bronchial irritation and cease to cough, but the scalp, unless protected, becomes affected by disease, with dryness, intolerable itching and falling of the hair.

Another curious effect of dust has been observed in a form of temporary deafness among the workers in jute, from which twine and bags are made. The fine dust of the jute fiber, mingled with the natural "wax" of the ears, packs into hard cakes against the tympanum.

Boxwood is used chiefly for manufacturing rulers and shuttles. The fine sawdust from this wood is quite harmful when inhaled. Men employed in boxwood manufacture for the first time, are liable to pain and smarting in the eyes, dizziness, symptoms resembling severe influenza and bronchial catarrh. Later, if they persevere in the work, they may become pale and jaundiced and suffer from asthma and cold sweats. The heart action becomes markedly slow, and an alkaloid has been obtained from the wood, which, when given experimentally to animals, causes depression of the heart and general muscular weakness. The wood of the California Sequoia has similar properties.

In this connection, a man who deals in fancy woods used for veneering told me an amusing incident. A new wood was received from an East Indian island for trial in the mills. On being sawed into thin slabs, it gave off a most unusual quantity of bright red saw-dust which covered the workmen. One of them, thinking to wash the dust from his hair, dipped his head in a bucket of water, when to his surprise the hair turned of a bright grass-green color. It took him several days of scrubbing to restore the natural color!

Although the inorganic and organic dust respiratory irritants do not produce necessarily fatal results, their effects often are those of chronic invalidism, strongly predispose to tuberculosis and render recovery from other diseases such as pneumonia, difficult. The moral of these forms of modern occupational diseases is to promote among laymen more intelligent understanding of the true economy of ventilation and enforce legislation requiring it in mines, grist mills and all factories where there is dust-laden air.

TOXIC GASES, VAPORS AND FUMES.

The next group of ailments, that due to inhalation of toxic gases, vapors and fumes, presents symptoms which are more acute and often more serious than those of the varieties of dust.

In general, these fumes, in addition to local irritation of the respiratory passages, are liable to cause serious depression of the heart action, anemia and muscular weakness. Workers in asphalt analysis are subject to sulphur vapor poisoning which causes grave anemia. Workers in trades in which various preparations of arsenic are employed may be seriously poisoned by fumes containing it. The vitriol solution used in depositing tanks in copper works may be associated with arsenuretted hydrogen gas, which causes dizziness, collapse, jaundice and hemorrhage from the kidneys. One of the most serious of the fume poisons is that derived from the white or yellow form of phosphorus, which when mixed into a paste, is used for the dipping process by which the Lucifer or "strike anywhere" matches are made. The fumes of phosphorus, besides causing the effects common to many other respiratory irritants such as bronchitis, anemia and digestive disorders, act further on the system through absorption and resecretion by the saliva which constantly bathes the tissues of the mouth in a hypersecretion, until finally the well known "fossy-jaw" or mandibular necrosis results. Unless the necrotic areas are excised, the victim dies.

In the Congressional investigation, held in December, 1910, regarding this matter, it was testified that the Bureau of Commerce and Labor had examined fifteen match factories. Mr. Andrews found that ninety-five per cent of the employees are in continual danger of this form of poisoning, including many women and children under sixteen years of age. In one factory, forty cases had occurred within a few years. One girl twenty-two years of age lost both jaws and died in a few months, and fifteen of the employees had required the surgical removal of one or both jaws. A man presented himself, not long ago, at my Cornell Medical College Clinic, with the entire floor of the nose eaten through into the mouth by inhalation of fumes developed by the manufacture of chromic acid used in the arts, and inquiry showed that similar cases are unfortunately not uncommon.

Workmen employed in gas works and as gas fitters frequently become anemic and suffer with disorders of digestion, from inhalation of the especially toxic ingredient of the gas, the carbon monoxid.

Although not exclusively an occupational disease, yet illuminating gas poisoning is a disease of modern life, prevalent in our large cities where many of the victims are ignorant foreigners, unaccustomed to the use of gas. It is not only the acute form of gas poisoning which interests us, but the much more insidious chronic type characterized by marked anemia, constipation, headache, drowsiness and lassitude so often met with in those who occupy or sleep in small rooms where that worst of foes of hygiene is kept—a gas stove, without chimney ventilation. The ordinary four-foot gas jet

consumes as much oxygen per hour as ten men, besides discharging into the air a number of deleterious products of partial combustion. In a recent analysis which I made of ninety cases of acute illuminating gas poisoning occurring in my hospital services, and those of my colleagues, nearly twenty per cent were fatal, and many were due to the careless use of leaky gas stoves. In the fatal cases, in several instances in which the patient had lived for two or three days, there was acute hemorrhagic softening of the brain, especially of the caudate and lenticular nuclei. There is often fever and a marked leucocytosis in such cases.

Copra, or the dried cocoanut kernels from which cocoanut oil is made and which is used also as an ingredient of curry, is stored in the holds of vessels plying between the Hawaiian and other Pacific Islands and various ports. In cleaning out the holds of these vessels, the natives are frequently overcome and sometimes fatally asphyxiated. Analysis of the gas which is evolved by this substance has shown it to be carbon monoxid—the same substance which is the chief source of danger in illuminating gas.

The men who clean out large gasoline tanks may suffer from vertigo and asystole, and the hazard of cleaning large beer brewing vats, which arises from carbon dioxid coma is well known. Lately there have been brought to my notice, a number of cases of chauffeurs who were overcome by gasoline fumes while cranking motor cars in small unventilated garages. They experienced vertigo, fainting and nausea, and one passed into coma, from which it was difficult to arouse him.

Workers in chemical manufactories may protect themselves to some extent by wearing respirators or breathing masks. As a matter of fact, however, they are very careless about their danger and where gas fumes are irritating, usually merely place a fold of wet towel over the mouth, and sometimes wear goggles to protect the eyes from smarting and inflammation. Workers in irritant dusts do not usually bother to protect themselves at all.

As in all occupational diseases, the treatment of the respiratory cases should be preventive, because, after the injury to the organism is done, it is usually of such a chronic nature as to be beyond repair. Moreover, as a chief agent in prophylaxis the frequent periodic and compulsory medical examination of employees subjected to hazardous trades should be insisted upon. If a man employed where there are irritant fumes or dusts shows decided anemia and bronchial rales, or perhaps a little dullness and diminished breathing at one apex, if he complains of poor appetite, a flatulent dyspepsia and constipation, he should be cautioned in time and made to change his work, if possible.

Physicians should formulate prophylactic directions for workers in hazardous trades which should be printed and displayed in prominent places. An enormous number of lives might annually be saved in this country by carrying out a few such simple, common-sense precautions, and there are many instances on record already where employers have been glad to adopt them, if for no other than economic reasons, when their value was pointed out by physicians. Blowers, open windows, air shafts, sunlight and dust-free cleanliness in all work-shops where irritants may collect, constitute the obvious remedies.

METAL POISONS.

The next group of occupational diseases, comprising the metal poisons, occasion serious lesions and disorders of the nervous and muscular systems, the arteries and heart, kidneys, digestive tract and sometimes the bones and other organs. Some of them, like mercury and arsenic, may give rise to vapors which are inhaled and others in the form of dust from filing or polishing, are conveyed to the mouth by unclean hands, or in food which has been exposed in workshops during the luncheon hour. By far the most common of the metal poisons, also the most diverse in its effects, is that of lead, and more than one hundred and fifty of the modern trade industries subject the workers to its dangers. Metallic lead may affect type-setters or miners, or the white oxide may poison painters and pottery workers, and plumbers are poisoned by handling lead pipe, solder and white or red lead. Among the occupations with which one is not likely to associate the danger of plumbing are the making of the metal capsules which fit over corks, the handling of lead carbonate in whitening rubber, the tempering in a molten lead bath of the spiral steel buffers of railway cars, and the making of files which are imbedded in lead in the process. Plumbism may occur in workmen who polish false pearls and in the machine girls who bind the whitened ribbon on masonic uniforms, etc. Dr. Edsall cites two cases of lead poisoning among dentists who were in the habit of mixing amalgam in the palm of the hand.

A few days ago, a young man of only twenty-three years of age presented himself at my clinic with most advanced arteriosclerosis, cardiac hypertrophy and a loud Flint murmur, the result of working with lead paints since he was thirteen years of age. During the past eight years, we have had in the hospital services in Bellevue and the Presbyterian hospital, and in my out-patient Medical Clinic in the Cornell University Medical College, two hundred and sixty-seven cases of serious lead poisoning arising from various trades.

Lead colic and drop wrist are well known to all house and carriage painters, as also to those employed in the mixing and canning

of white lead and its products, but in my experience they do not recognize the causative relationship of the anemia, headache, constipation and muscular weakness, much less the arteriosclerosis and chronic nephritis, which this metal produces. At least they fail to understand the significance of such symptoms until the pathologic changes may have advanced beyond control. Fortunately, for so serious a poison we possess many means of diagnosis in the reasonably early stages, for a man may carry a lead line on the gums, or give a granular basophilia, or a trace of lead in the urine for months or perhaps years before he becomes hopelessly invalidated.

Whereas the immediate effects of lead poisoning merely incapacitate the artisan from work, the remote effects may prove fatal from advancing arteriosclerosis, cardiac hypertrophy, aneurysm or hemorrhage, or chronic nephritis. A few years ago, I published an analysis of two hundred cases of gastric ulcer admitted to the wards of Bellevue and the Presbyterian hospitals which showed a striking prevalence of the disease where it occurs in males, as affecting metal workers or those employed as metal polishers, painters, typesetters, etc. Fully twenty-five per cent of the cases among middle-aged males were in men of such occupations. It is possible that an early arteriosclerosis affects the gastric arteries among others and thus favors the occurrence of localized necrosis and ulceration.

A far-reaching effect of chronic lead poisoning is manifested in the offspring of lead workers. Their wives are especially liable to miscarriage and their children often die in early infancy, showing little resisting power against disease.

The workers in brass and bronze suffer from forms of poisoning which have been made the subject of special study by a member of my staff in the Cornell Medical Clinic, Dr. Montgomery H. Sicard. While copper and zinc form the basis of the brass and bronze alloys, inferior grades contain much lead, and tin also is added in the manufacture of bronze. Dr. Sicard found that pure copper is not likely to occasion disease, but fumes arising from the preparation of zinc oxid produce acute symptoms such as chills, nausea, diarrhoea and other digestive disorders, as well as grave forms of anemia and muscular weakness. Although pure metallic copper is not especially injurious, its various compounds are, and cases of poisoning from eating food which has been prepared in unclean copper vessels are familiar. Chronic copper poisoning from its salts gives rise to a staggering gait, vertigo, nervousness, gastrointestinal disorders and a greenish blue line on the gums. The hair may become green in the presence of copper fumes.

Zinc white is much used at present as a substitute for white lead in making paint. In the process of drying and sifting it, poisoning may occur. In printing or etching on zinc plates, both phosphoric and chromic acids are used. In one shop where this process was conducted, one-sixth of the workmen showed the effects of chromic acid poisoning. Makers of bronze powders suffer from poisoning by copper, zinc and arsenic.

A nearly fatal case of zinc poisoning not occupational but observed in early infancy was recently reported. The child's nurse diluted its milk with water drawn from the melted ice in a zinc-lined refrigerator. The child acquired painful swollen joints, anemia and serious digestive disorders. How simple it would be to post a warning in all such receptacles against drinking or eating anything which has come into direct contact with the zinc.

The substitution of silver nitrate for metallic mercury in the making of mirrors has lessened the number of cases of mercury poisoning, but there are many other trades in which mercury is a source of danger. It is volatile at such a low temperature that its vapor readily condenses on the beard or hair, attacks the mucous membranes and is deposited as an oxide in creases in the skin. Gold mining involves the use of metallic mercury and acid mercurial nitrate. In the Spanish mines, cases of mercurial poisoning are so frequent that convicts are employed to work them,—upon a not very humanitarian basis. They suffer from tremors, especially of the muscles of the face, anemia and loosening of the teeth. Mercurial nitrate is used in the dressing of felt hats and rabbit skins and mercurial poisoning is common among makers of barometers and of the vacuum pumps used in the manufacture of incandescent lights.

Chronic arsenic poisoning gives rise to multiple neuritis. I have seen complete paraplegia from it. It also causes mental depression, anemia, loss of weight, bronchitis, ulcers on the fingers, and eczema. Those who are especially subjected to its effects are makers of arsenical pigments such as the arsenite of copper, or Paris green. Cases have occurred among sheep herders who used arsenical solutions for dipping sheep to destroy ticks, and among gardeners and green-house men who used the arsenical insecticides.

While it is true that most of the workers in the poisonous metals are warned of their danger, my experience with them is that each man usually thinks he will prove an exception to the rule, and like the coal miner long accustomed to deal with fire damp, finally forgets the danger and courts disaster.

I shall omit detailed reference to the influence of foods, drinks and drugs in special occupations, and select a single example of a traumatic neurosis, because it is so striking, and the remedy so simple. Dr. David L. Edsall, writing of this topic in the *Journal of the American Medical Association*, quotes an experience of Dr. Latta, chief of the Pennsylvania Railroad Relief Association, who found that an exceptionally large number of locomotive engineers suffered from sciatica of the right leg, due to sitting on a bench sidewise with the left leg hanging free, and the weight of the body resting on the right hip while subjected to constant jolting. The ends of the benches were cut off to enable the men to sit squarely while facing forward, and further cases ceased to develop.

A single illustration of the large group of miscellaneous occupational diseases must suffice. It is the caisson disease of which I have seen a number of illustrations in New York, where we appear to be actively burrowing in all directions. In a recently published report of Researches from the Department of Medicine in the Cornell University Medical College, Dr. Edward L. Keays of my Clinic, has given the most exhaustive and interesting study of this disease which has yet appeared. As physician to the Pennsylvania Railroad, he studied three thousand, six hundred and ninety-two examples of the caisson disease with twenty deaths among the ten thousand workmen employed in four of the great river tunnels, practically all of which cases were due to too hurried exit from caissons where the men had worked at hard labor under from thirty to forty-five or more pounds of atmospheric pressure. With such rapid decompression the nitrogen of the air which has been forced into the blood under the increased pressure, when this pressure is relieved, form bubbles which act as emboli. The emboli by obstructing capillary blood supply as well as by disruptive mechanical violence, give rise to the well known spinal cord destructive lesions and symptoms, such as dyspnoea or the "chokes," cramps, or "the bends," paralyzes and anuria.

CONCLUSIONS.

In conclusion I would emphasize that the occupational diseases are more or less the concern of us all, for there is no one who does not make use of some personal article or acquire some possession or personal benefit from the products of trades which involve some degree of hazard to the artisan or laborer. The pity of it is that these hazards are for the most part preventable by relatively little expenditure of money and relatively great expenditure of common sense.

As physicians we have an ever present duty as well as opportunity to inculcate the gospel of fresh air ventilation and hygienic cleanliness. We have also the means of early diagnosis of the incipient changes in the organism produced by hazardous trades, changes in the arteries, the kidneys, the lungs and the blood. I would submit the following suggestions as being reasonable and practical solutions of many of the problems involved.

1. A more thorough and systematic collection of statistics of the occupational diseases by our health boards.

2. A more concentrated study of the subject by those who may have exceptional opportunities to observe these diseases in dispensaries or factory settlements or otherwise.

3. The posting in factories and mills involving hazardous trades, of printed rules of hygiene formulated by physicians to enlighten the operatives and warn them of their dangers.

4. The education of the public in these matters by lectures on hygiene, such, for example, as are now offered by the New York County Medical Society and by others under the auspices of the American Medical Association.

5. The pointing out to manufacturers of the economy to be derived from periodic examination by paid physicians of their employees, with the object of preventing invalidism and increasing thereby the number of working days.

6. The use of the influence of our various medical societies to encourage suitable legislation where necessary, to control hazardous trades, enforce factory ventilation and cleanliness, the use of protective appliances, etc.,—in other words, to protect the workman from the diseases, as he is now largely protected from the surgical injuries of occupation.

In this brief review of so broad a topic, it has been impossible to do more than indicate the great number and variety of the disease hazards of occupation, but if in so doing I may direct attention to and stimulate interest in them, I shall feel rewarded.

SURGICAL SUGGESTIONS.

The sooner a hollow bone is opened in acute osteomyelitis, the less will be the destruction of bone.—*American Journal of Surgery.*

In intestinal obstruction, it is not the operation that is to be feared, but the delay in operation.—*American Journal of Surgery.*

When there is disagreement between the pulse and temperature, the pulse must be regarded as of the greater importance.—*American Journal of Surgery.*

A felon should be aborted by covering the end of the finger with cotton saturated with alcohol, and then excluding the air by drawing over all a rubber finger cot.—*American Journal of Surgery.*

EFFECTIVE MEDICAL CHARITY.

BY MR. FRANCIS HILLER, OF PORTLAND.

I realize that the above title is so general as to include almost any subject within the domain of medical science, but I have chosen it because it suggests to me the analogy between the two general conditions of effectiveness in medical charities and in other forms of charity—first, that those who do not need charity must be denied it; and secondly, that charity must include adequate treatment for those who do need it. It was with hesitation that I undertook to prepare this paper, and only with the understanding that I was expected simply to present from a social worker's point of view certain suggestions regarding an approach to the solution of what is admitted to be a most vexing problem, even by the most capable administrators of our great medical philanthropies. It was concerning the first general condition of effectiveness that your Chairman especially desired me to speak. To what an extent the abuse of medical charities has been carried, you of the profession do not need to be informed. It is not an evil that is disappearing of itself. Dr. Stephen Smith, former Director of Public Charities of New York City and member of the New York State Board of Charities, said before the National Conference of Charities and Corrections in 1898, after a careful investigation, that the ratio of those applying for medical charity in New York City to the whole population of the city rose from about sixteen per cent in 1860 to forty-nine per cent in 1895. Is it not remarkable that the most extensive and costly charities of all, the medical, should be administered with so little discrimination? The truth appears to be that the medical profession have been so absorbed in the purely medical side of hospital and dispensary work that the wider social significance of these institutions has been lost sight of, as well as their own private profit. The methods which Dr. Smith found in use are, I suppose, those which have invited the same abuses elsewhere. He says: "In many institutions the only method pursued is to ask questions about the income and cost of living of each patient, the purpose of which he immediately apprehends and answers accordingly. A large number of institutions report that they determine the ability of patients to pay by their personal appearance; and others frankly admit that no attempt is made to discover the patient's worthiness."

During the past fifteen years, there has been an increasing appreciation of the evils of this abuse. It is not alone that there is a financial loss to the legitimate private practice of physicians. A physician himself has said, "The only question is the moral question;

and the bearing of the abuse of charities upon the income of physicians is secondary. While the physician is justly entitled to proper remuneration for his labor, the profession of medicine is entirely unmercenary. The higher aim, indeed, of the physician is the prevention of disease, which necessarily reduces his income." Of greater consequence is the diversion of public money from other uses, even medical uses, such as the care of the insane, feeble-minded and epileptic, and other public uses, in order that well-to-do beggars may have free medical treatment, or treatment at nominal cost, in institutions maintained wholly or in part by the State. Hospitals and dispensaries have advertised for patients in order that the figures in their annual reports might be swelled, and form the basis of appeals for bigger appropriations. Institutions have been unnecessarily multiplied in many States, and their efficiency consequently impaired. And from the social worker's point of view, a most serious result is the effect upon the characters of the persons and families who have unworthily profited. One need not look far for strong statements, from medical men as well as social workers, to this effect. Says one, "Medical charity is the greatest pauperizing agency of a great city." Another, "A large proportion of our pauperism notoriously originates in relief granted in sickness." Another, "Gratuitous medical relief is the inlet through which the habit of pauperism first creeps into the poor man's house: it is the ready introduction to permanent pauperism and deception." "Those who have once accepted this kind of relief often lose the sense of responsibility and independence, and do not emerge again from the ranks of pauperism." From free medical advice and treatment, it is a short step to free medical supplies, and from them to free sick diet, to free provisions, coal, rent and clothing.

Whence may we expect help in solving this tremendous problem? I am satisfied to present my suggestions very briefly, because they are made entirely in the hope that they may arouse discussion in your organization.

If the nominal fee system is used in any of our dispensaries, it should be abolished. It only disguises charity. It leads many to believe that they are paying their way, and have a right to apply for treatment regardless of their financial condition. The public does not need any help in misunderstanding medical charity. Enlightenment is needed; placard the dispensary and clinic waiting rooms conspicuously to the effect that only those unable to pay are entitled to free treatment. If the fees ordinarily charged do not cover all the expenses, let the patient understand it so.

The prime prerequisite to the adoption of any measure of relief, however, is a common understanding and joint action by all the

agencies involved in a given community, and perhaps here in our neighborly State of Maine the given community must mean the State. The difficulty of securing such a common understanding and agreement as to a plan of action has been the chief obstacle to reform in many communities. We are handicapped here in this respect by our lack of a State Board of Charities, to which we might look for aid in many ways; in bringing about co-operation among the various agencies and institutions involved; in bringing to us the best experience of the States; in aiding our institutions in working out whatever plan might be adopted and in securing the aid of the legislature when necessary. Perhaps this organization ought to join in the demand for such a Board. Certainly help is to be looked for, if at all, from a State-wide body such as yours.

But the particular suggestion which I have most strongly in mind, and which, with united action on the part of the medical agencies, might be carried out in some form, is simply this: that medical charities must adopt the same method which alone is bringing order out of chaos for other charitable activities: they must investigate applicants for free treatment.

The medical institution must extend its view so as to include the home of the patient; and not merely in order that the well-to-do may be made to pay, but also in order that the needy may have adequate treatment. We cannot touch upon this suggestion without confronting the whole subject of hospital and dispensary social service. Whether you are investigating applicants for aid, or aiding those found in need, you are applying the principle of that text inscribed over the door of the great Virchow Hospital in Berlin, and which has so often been repeated as the motto for hospital social service, "Treat the disease; but do not omit to treat the man."

This great movement in present-day medical charities is developing along two lines; the employment of social-medical workers by the hospitals themselves and second, co-operation with other social organizations in the community. The discussion of the first of these is aside from our present purpose. With regard to the second, I wish to state my belief that none of us here, either social agencies or medical agencies, have begun to appreciate the opportunity for mutual helpfulness.

I suppose that in Boston, the home of Dr. Cabot, of the Massachusetts General Hospital, this medical-social co-operation has been as well developed as anywhere. The medical agencies of that city make free use of the Associated Charities and the Confidential Exchange. This Confidential Exchange of information regarding applicants is used there by two hundred and eighty-eight agencies, of which thirty-

three are medical. Last year, these medical agencies made eight thousand, nine hundred and forty-four inquiries of the exchange, and received four thousand, two hundred and twenty-six notifications from it, out of a total of sixty-five thousand, four hundred and thirty-six inquiries and thirty-one thousand, seven hundred and ninety-three notifications for all agencies; that is, about one-seventh of the total use made of the exchange was by the medical charities. The method of this Confidential Exchange is briefly this: whenever any agency makes inquiry regarding a family, a card is made out at the exchange with the name and identifying information regarding the family, the name of the agency inquiring and the date. The identification card bears no history of the family, or remarks pertaining to its character or condition. If later any other agency inquires regarding the same family, it will be told of the previous inquiry, and the first agency will be notified of the second inquiry. The value of this simple procedure is best illustrated by concrete cases.

A clergyman went to the children's outing department of a daily newspaper, and asked that a child in whom he was interested should be sent into the country on one of their vacation trips. The outing department inquired, as was its custom, at the Confidential Exchange, and it was found that hospital had inquired about the family of the boy. On calling the hospital, the head worker said that on no account must the boy go on the outing, that the doctors were very much interested in his case and that plans were on foot to send him to a convalescent home. The hospital worker at once communicated with the newspaper.

A private individual referred a girl of nine to a child-helping agency, asking that the child be placed in the country because of her physical condition. Through the Confidential Exchange, it was learned that the girl was receiving regular treatment at a dispensary. The physician at the dispensary was consulted, and advised placing the child in the country. She was so placed, still to be under the care of the same physician and under the supervision of the child-helping agency. After a few months the child returned home, perfectly well.

A child-helping agency to which a woman had applied for help in caring for her little boy, sent the woman to another child-helping agency which was equipped to render the special service needed.

When the woman called at the office, she was in a very nervous and excitable condition, so that it would have been most unkind to question her. On telephoning the Confidential Exchange it was learned that the woman had been inquired about by two public agencies, and three private child-helping agencies. These agencies were consulted, and the woman was not further questioned as the necessary information

was gained from them. After the agency had taken the child into their care, the woman told how grateful she was that she had not been obliged to tell her story over again. She inferred, however, that the agencies to whom she had previously applied had been consulted before the child was taken.

On commenting upon the above incident, the secretary of the agency which took the child, remarked, "I am sending you the brief summary of a case which recently came our way, where through the use of the Confidential Exchange a nervous and excitable woman was saved much embarrassment, and probably pain."

At the time of a public calamity, relief was asked by a private individual for a woman who was found, on inquiry at the Confidential Exchange, to be in care of one of the churches. The Confidential Exchange telephoned the church missionary who said that she was very glad to be informed of the need, and said that she preferred to visit and provide all that was necessary (which by the way, she thought she had done) as the woman was old and sensitive, and would be troubled by a call from a stranger.

A clinic physician referred to the social service department of a hospital, the case of a woman of thirty-six, suffering from an acute abscess. She had told the doctor that she had six children under ten years of age, and that her husband was out of work. Before the patient left the hospital the social service worker called the Confidential Exchange and learned that six agencies had inquired about the family: two private relief agencies, one medical agency, one public and two private child-helping agencies.

A conference was arranged at which four of the agencies interested in the family were represented. One relief agency, one private child-helping agency, one public child-helping agency, and the social service worker. At the conference a definite plan for the patient was developed, and was successfully carried through.

A baby in which Hospital A had been very much interested because of the medical treatment of the mother before its birth, was visited by a member of the Social Service Department to give instruction in feeding under the supervision of one of the doctors in the Children's Department. The treatment of the baby was very dependent on the previous history, extending over many months, which the hospital had of the mother. The mother did not return to Hospital A with the child as promised, but on the day she was expected, she went instead to Hospital B, where she was referred to the Social Service Department of that hospital. The woman asked the kind of treatment that hospital A had thought unwise and hospital B, without knowing this fact, had also thought the treatment unwise and had

referred to the Social Service Department. The Social Service Worker at hospital B on receiving the case called the Confidential Exchange and learned that Hospital A had inquired about the family. Hospital B at once called Hospital A and upon learning that Hospital A knew the history of the case, and were trying to instruct the mother how to properly feed the child, Hospital B left the case in the hands of the hospital which first had the case.

A child who had been receiving treatment for more than two months at Clinic A was taken to a private physician by its mother because she felt that the treatment was not progressing fast enough. Later the mother took the child to Hospital B., where the doctor, ignorant of the fact that the child had been a patient at Clinic A, referred the case to a third Hospital, C. The Social Service Worker at Hospital B learned on inquiry at the Confidential Exchange that the child had originally been a patient at Clinic A. Within a day or two the mother appeared again at Clinic A. A conference of all the doctors interested was held, the plan being to centralize the treatment in the interest of the patient.

There is no reason why the medical and social agencies of our own community cannot co-operate in the same way. The Associated Charities offers the facilities, and is carrying on the same work, although we have not a special department with a separate corps of workers in charge, as in Boston. Steps should be taken to inaugurate fuller and more satisfactory co-operation of this kind.

In some cities, the medical charities also use social agencies such as the Associated Charities for the investigation of applicants for free treatment and to secure for needy families the social service or charitable assistance which they may need, in addition to the resources at the command of the hospital. A mere notice to applicants for charity of any kind that they may be investigated is sufficient to keep away many of the unworthy. This, however, is an exceedingly difficult field, requiring as it does, complete unanimity among the medical agencies, and complicated as it is by the often widely differing viewpoints of the physician and the social worker. The former, accustomed to the use of the best equipment that money can buy in the treatment of the poorest hospital patient, is disappointed if the relief agency does not at once lay out a hundred dollars or more in the home of the applicant; while the social worker must admit that material relief has too often been stinted and inadequate. We have not raised enough money for relief work of the right sort. This whole problem seems to be finding its solution through the development of hospital social service—the employment by the medical agency of medical social workers who understand both viewpoints, and work out co-operation

much better than it can be done without them. However, any reputable Associated Charities stand ready to make investigations and render other social service when asked to do so, and the only reason for hesitation of which I have heard has been the fear that the large amount of additional labor involved may overtax their finances; they have therefore, sometimes called upon the medical agencies for aid in this particular.

In your deliberations upon this subject, be assured that the Portland Society stands ready to co-operate with you, and work out with you whatever plans you may have for the advantage of the poor, for whose sake we both exist.

ABORTION.

BY WALLACE E. WEBBER, M. D., OF LEWISTON.

While the subject of this paper was given as abortion it is rather a misnomer, as I intend to treat in particular with the management of inevitable abortion or miscarriage under the fifth month. It has been my observation that this class of cases come more frequently to the young practitioner, and I believe that our Medical Schools' and Text Books' teaching are not strictly up-to-date in the care of such patients. They do not take into consideration the fact that nine-tenths of such cases are caused by criminal interference, which nearly always produces more or less sepsis. The great majority are caused by the so-called operation and that means something, usually a catheter, passed into the uterus not once but a half dozen times. I do not believe that an abortion can be caused by a surgically clean instrument simply being passed into the uterus and immediately withdrawn, without rupturing the waters, in other words, I believe that an abortion caused by instrumentation, such as usually used by the criminal, is due to sepsis introduced by the instrument, unless the instrument ruptures the bag of waters, which in cases that have come under my observation is very rare. The majority of cases which I see have had an instrument passed into the uterus anywhere from once to even twelve or more times, if I can believe what they say, and finally after becoming thoroughly septic the uterus tries to

throw off its load. Twice to my knowledge I have passed a sterile sound to the fundus of a pregnant uterus without causing any trouble whatever, and a number of times I have dilated the cervix almost to the inch mark on the dilator, and have never yet seen any trouble from the procedure; nevertheless I approach such cases with fear.

I find a number of women who claim to have passed the catheter upon themselves and one patient has a steel sound with which she has twice brought about abortion at the second month. I have found that the cases brought about by other causes than infected instruments give me less trouble, for the uterine contents come away en masse if let alone.

As a rule we are called to abortion cases late, because the patient is afraid that if they call early you will do something to stop it from going on and they want it to go on. If called early before the os is dilated sufficiently to admit the forefinger and where there is not much hemorrhage I usually give ten grains of quinine and go away for a long or short interval according to the pains. Of course we are talking about inevitable abortion. If there is a good deal of hemorrhage, and this is very rare for the foetus or bag of waters plugs the os, why one has got to tampon. As a rule there is very little hemorrhage until the foetus has come away and if that has come away the uterus should be emptied and not tamponed. I believe that it is extremely rare that a tampon is necessary, for in ninety-nine cases out of a hundred if there is much bleeding the sooner the uterus is emptied the better for them and not till then will the bleeding stop. Throw away the old notion of tamponing a bleeding uterus and get to the bottom of your trouble with clean hands and cleaner instrument and remove the cause of your hemorrhage. I wish that I might say never tampon, but unfortunately there are exceptions and you will have to tampon once in a great while.

As a rule as before stated when we first see the case the os is quite well dilated and more or less of the uterine contents protruding into the vagina. Now it is a great temptation to take hold of it and try to tease it away from the uterus. That same thing has given me lots of trouble in the past for the thing will seemingly tear easier than any tissue paper ever made and part of it left behind, and we can have no certain idea when we leave whether we have all the contents of the uterus or not. I make it a rule never to make any traction unless I am sure that it is so nearly all in the vagina that I am certain to get it intact. In such cases where it is whole and the uterus has not been infected I do not wash out the uterus, but leave nature to do her own cleaning as she always will in such cases better unmolested. If there is high temperature I always wash out the uterus.

When the case is sufficiently advanced so that I do not dare to leave it I then take a trivalve speculum and a wash out and blunt wire curette, dressing forceps and dilators and boil them in lysol solution. I bring the patient to the edge of the bed with the buttocks in a kelly pad and the legs supported with a kelly crutch. I wash the external genitals with synol soap and also my hands. I have a large fountain syringe full of lysol solution. With the speculum in place I next dilate if necessary the os uteri and frequently when well dilated the foetus sack and all will drop into the vagina. If not I grasp the sack, or if the foetus has come away, the placenta and pass my dull curette up to the fundus. I gently detach the whole thing from the uterus and then while making slight traction with the forceps I pull down with the curette from above. The temptation is to pull too hard the same as it is a temptation to begin work too soon, before the uterus has done what it ought to in the separating the decidua from itself. One great lesson to learn is, the more haste the less speed. There is a time to interfere and the knowledge of just when that time is must be learned by experience at the bedside. All is, do not be too much in a hurry unless hemorrhage demands it. If you begin too soon you will pull too hard and tear the placenta, thereby leaving a portion behind and it is no easy matter to be sure that you have got such a piece away inasmuch as you cannot see and it slips around the curette eluding all attempts to grasp it or even to feel it. After delivering the placenta I gently rotate by broad curette thereby entangling any small loose pieces left behind and without force I go over all sides of the uterine cavity. As soon as my curette returns clear I introduce my wash-out curette and gently wash out the uterus with lysol solution, one dram to two quarts of water. Be careful and not have the fountain too high, as too much pressure might force the fluid into the tubes and abdominal cavity. After such a clearing I have never had any trouble. Once or twice I have thought I had the uterus clear, but afterward found that because of the position of the uterus my curette had only gone to the internal os. At first thought that may seem like a foolish mistake, but some uteri have a considerable cul de sac between the external and internal os and a very sharp bend at the internal os and I have seen able men puzzle to know whether or not they had got a sound beyond the internal os. I usually insist that my patient shall stay abed and take the same care of herself as she would do with child at term. As a rule ether is not needed and I almost never give it.

I will report a couple of cases that were a little out of the ordinary.

I was called one afternoon to see a Miss G——, age 22, previous health good. She was three months pregnant and had submitted to five so-called operations during the previous two weeks. She had a temperature of $105\frac{1}{3}$ and a pulse of 140. She was in general distress all over, but no uterine pain. There was a nasty discharge from the uterus, but the os was not dilated. Dr. Dixon saw her with me a short time after and advised giving 15 grs. of quinine, and waiting. Within a few hours pain came on and I emptied the uterus as described with the result that she made an uninterrupted recovery. I report this case to illustrate the extreme condition into which a patient of this type may get and how promptly they recover when the uterus is emptied. A large number of cases look very bad, but almost always recover.

One afternoon I was called to see a Mrs. R——, she was a young married woman, robust and of healthy parentage. She was between two and three months pregnant. She had a temperature of 105 and a fraction, pulse 130 and uterine pain and was flowing. She absolutely denied having done anything to cause her trouble and stuck to it to the end, although I cannot help feeling that she knew more than she would admit for I never saw such a temperature with an unmolested uterus. Upon examination I found the contents of the uterus almost delivered into the vagina and with almost no effort on my part I quickly had them entire. It seemed to me that I had the contents of the uterus so clean that it would not be necessary to wash out the cavity, so that I only gave a vaginal douche and left her. The next day her temperature was down to 101, and she seemed better, although her pulse was still rapid. The next day her temperature was 105 again and I washed out the uterus. The next day it was still 105, and Dr. Donovan saw her with me. The uterus was curetted and washed and rewashed but in spite of everything she continued to have a high temperature and died within a week.

In looking back over the case the only thing that I can see to change is that I should have washed out the uterus at my first visit. If ever you have a case with a temperature above 102, be sure and wash out the uterus no matter how clean the contents have appeared to be.

To recapitulate:

Be sure and have your hands and instruments surgically clean.

Do not be in too much of a hurry unless hemorrhage demands it.

Do not use force, but be sure that the uterus is emptied before you leave.

Carefully used you will find the proper instruments much more effective than the hand.

Necrology.

EDWARD PITT MARSTON.

Edward Pitt Marston, a former member of our Association and a son of Dr. Daniel Edward Marston, also a man of high standing in our ranks was born in Monmouth, Maine, July 4, 1862. After an education at home and for part of a course at Bates College, this young student decided to begin at once the study of medicine, instead of employing four years at college. He entered the Medical School of Maine where his father and a brother also had studied, but finally obtained his degree at the Dartmouth Medical School in 1884. He then took a long post graduate course in New York and began to practice in his native town where he worked steadily the rest of his life. A man of very retiring disposition, he rarely wrote papers and rarely spoke in discussions, but was always present at the meetings of our Association, as well as of the Kennebec County Society, of which he was Vice President. He took a keen interest in enlarging his mental horizon by listening to the exposition of modern medical advances at the meetings of his brother physicians in Maine. He was a very considerate man and extremely courteous to his patients and to all with whom he came in contact.

After some twenty-five years of hard country practice, he had the misfortune to suffer from a stroke of paralysis which disabled him for some months, but rallying finally, he resumed his practice and worked to his very last day. For returning one day from a difficult case, he lay down to rest, soon lost consciousness, and never spoke again. The day of his death was October 27, 1909. Though in appearance a mild and gentle man, his medical life exhibited daily instances of power and force.

J. A. S.

RANDALL DOYLE BIBBER.

Much has been written in local histories of Bath, concerning Dr. Randall Doyle Bibber (1845-1910) as a citizen and mayor of the city in which he practiced for many years. I find, however, but little printed concerning his life as a physician. More can be said, but briefly. I find that before studying medicine at all, he went to sea for

some years, and from that occupation obtained a fund of anecdote which served him well at many a bed-side, during his long practice.

He was born in Brunswick, the son of John Doyle Bibber and Mehitable Cowen Hall, his wife, and had a brief education in his native town. After several voyages, he began to study medicine and was graduated from the Medical School of Maine in 1871. His parents, having long since removed to Bath, Dr. Bibber established himself there in practice and soon had all that he could care for. This success lasted for life. He was port physician, member of the board of health for many years, took part in the founding of a home for aged couples also his local historical society and was a success as Mayor of Bath.

Dr. Bibber attended regularly the meetings of this Association, took an active part in its transactions, talked freely at times on topics in which he was interested. He communicated papers on brain disease on two occasions and was president in due season. In his inaugural address, he went beyond the ordinary bounds of such occasions and spoke most feelingly of the need of educating and assisting the younger men in the profession, because upon their shoulders all too soon would fall the heavy burden now resting on our own.

In appearance, he was a handsome man and always met you with a most cordial and winning greeting. He died June 10, 1910, and is succeeded by a capable son, a member also of this Association, Dr. Harold Thornton Bibber of Bath.

J. A. S.

A Fine Line of Sterilized Solutions.

Hermetically sealed glass ampoules containing sterilized solutions of important drugs for hypodermic use have assumed a commanding place in medicine in a comparatively short period of time. Two or three years ago, seeing the tendency in this direction, Parke, Davis & Co., brought out a modest line of something like a half-dozen formulas, notable among them being solutions of Adrenaline, Codrenin and Cacodylate of Sodium. From this small beginning, the line has expanded until now the company announces a total of about twenty distinct formulas. The full list, we understand, is now appearing in display advertisements in the leading medical journals of the country. Physicians who are interested in this advance in hypodermic medication—and every physician ought to be—will do well to search out these advertisements and familiarize themselves with the comprehensive line of solutions therein offered.

Solutions provided by the glaseptic ampoule, it is obvious, have several advantages over those prepared in the ordinary manner. They are ready for immediate use; there is no necessity to wait until water can be sterilized and cooled. Accuracy of dose is ensured, each ampoule containing a definite quantity of medicament. The solutions are aseptic; they are permanent.

JOURNAL OF MAINE MEDICAL ASSOCIATION

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*Editorial Comment.**Occupational Diseases.*

Attention is called to the article on this subject, on another page by Dr. W. Gilman Thompson of New York.

The subject of occupational diseases is attracting an increasing amount of attention in this country as it already has abroad.

Thirteen States and the United States have legislated on the subject to the extent of requiring that industrial accidents and diseases be reported. With the data thus obtained it is hoped that future legislation may deal directly with the prevention of such accidents and diseases.

The modern workman is peculiarly the victim of his environment. A factory employee, for instance, must take the air and the light of the room in which he works, as he finds them. The former may be dusty and the latter dim. Lungs and eyes may suffer in consequence but the remedy for these conditions does not lie with the employee. If he does not like his job he can try to get another. The employer is slow to move in the matter, possibly because his own lungs and eyes are not irritated.

What is wanted is a compulsory system of inspection of the hazardous trades by State or federal officials, the installation of accident saving devices, (many of which are very simple, such as painting dangerous parts of machinery red, or enclosing them in wire-mesh), and the standardizing of temperature, light and the quantity of dust, fumes, etc., allowable in factories and workrooms.

These are but a few of the things which might be done. Each hazardous trade has its own special dangers, which government would

take cognizance of and protect the workers therein to the extent of its ability.

Dr. Thompson's conclusions are heartily recommended to the consideration of the profession.

C. R. B.

Committee Report.

During the past six months, a committee of one has been appointed by each county society to take under advisement some of the more active problems in view of reaching some concerted action by the State Association in June.

The Committee, having reviewed work done by the various States together with all other available data have met, discussed and re-submitted to their respective county societies the principal arguments for and against the measures introduced and their recommendations.

It now remains for the county societies to adopt, amend or reject any or all of the resolutions embodied in this report and so instruct their representative to vote in accordance with their action, at a meeting to be held prior to the State meeting.

Secure New Members.

The Journal has received, from time to time, requests from members of county societies to send copies to reputable physicians whom they think might be induced to join their society.

It is a significant fact that only six hundred and twenty-five out of some eleven hundred physicians practicing in the State of Maine are members of the Maine Medical Association. Some few of the counties have appointed a committee to make a canvass of their county, inviting these men to join. If the secretaries will send in a list of these men, we will gladly send them copies of the Journal and a letter outlining some of the advantages of membership.

Let us have at least eight hundred members by June.

Medical Charity.

In a very able paper appearing in this issue under the title of "Effective Medical Charities" by Mr. Francis Hiller, Secretary Portland Associated Charities, we find some few facts worthy of the careful consideration of the Medical Profession, for instance, that the ratio of those applying for medical charity in New York City to the

whole population of the city rose from about 16% in 1860 to 49% in 1895. Later reports show decided increase since 1895. The moral side of the question is important in that it is the first attempt on the part of the majority of patients to secure charity and succeeding in this, they are ready to take advantage of other forms of charities.

The diversion of public funds from other and more worthy uses such as the care of the chronic tubercular cases, a more effective plan of health conservation, the proper care of the blind, deaf and feeble minded, the betterment of conditions in caring for our insane, etc. These questions deserve our most careful consideration both as physicians, who are responsible for medical charities, and as tax payers.

Mr. Hiller's suggestions of a common understanding and joint action by all the agencies involved in a given community is a most commendable one. We sincerely hope that every member will read the above mentioned paper.

The Owen Bill for National Health Department.

The accompanying bill explains itself and it is needless to say, it has the endorsement of the profession of the country.

Opposed to it, we find the National League of Medical Freedom, led by Senator John Works of California, who stated that he and other members of his family were treated by prominent physicians and finally were cured by Christian Science (his wife, so far as can be learned, is a practitioner of this faith).

The same league was the active factor behind the Willey investigation, inasmuch as the reforms instituted at the instigation of Dr. Willey would materially affect their business. The personnel and officers of the league is shown in the following editorial from Collier's and explains itself.

1. Mr. B. O. Flower, one of the nine founders of the league, and now in his second term of President of it, was President of "The R. C. Flower Medicine Company" from 1895 to 1899. R. C. Flower is the notorious quack and general humbug whose latest arrest was as late as 1908. B. O. Flower wrote the league's pamphlets on "Bubonic Plague" and "The Compulsory Medical Inspection of School Children." His views on patent medicine are often expressed. For instance —

"I believe that a great majority of the proprietary medicines are infinitely less dangerous to the public than the majority of regular doctor's prescriptions."

2. C. W. Miller, Second Vice-President of the league, was also one of the founders. In his newspaper, which publishes patent med-

icine advertising, he has constantly fought the medical profession. Last year, one of his addresses against what he calls a "doctors' trust" was delivered to the Dairy Association in Baltimore. We may say in passing that "Collier's" does not believe in freedom to sell tuberculosis milk any more than it does in freedom to sell tuberculosis meat.

3. Mrs. Diana Belias, a director and also a founder, has appeared before in this paper as President of an anti-experiment society, a well-meaning, ignorant, reckless and muddle headed agitator. We are officially informed by the chairman of the "Committee on Publicity and Education" of the league that Mrs. Belias was made a director "because of her courageous efforts to secure a higher law in New York State than the doctors' cruel theories and professional arrogance." Here's to anti-experiment, meningitis, diphtheria and freedom.

4. Dr. C. S. Carr, who is on the advisory board, edits a pseudo-medical sheet. Collier's, long ago, printed a letter signed "The Peruna Drug Company, per Carr." As editor of "Medical Talk for the Home," he carried advertisements of many of the medicines exposed in Collier's in our series on "The Great American Fraud." He is now editor of the Columbus "Medical Journal," which he at once turned from an ethical sheet into a sheer fraud. Look at the issue of May, 1909. On the front cover is a picture of Carr himself writing: "All drugs are poison. All druggists are poisoners." On the reverse side is an advertisement beginning: "Prescribe Antikamnia and Codein tablets in la grippe, headaches, etc." Hurrah for freedom and Peruna.

5. George P. Englehard, who is on the advisory board, has for a long time, in his journals, defended the patent medicine interests.

6. Charles Huhn, also a member of the board, is a prominent officer in a co-operative patent-medicine concern.

7. Another founder was a member of the advertising agency which is now spending for the league money which it puts into its advertising campaigns.

From the Bulletin of the Los Angeles County Medical Association.

Text of Proposed Owen Bill.

BE IT ENACTED BY THE SENATE AND HOUSE OF REPRESENTATIVES OF THE UNITED STATES OF AMERICA, IN CONGRESS ASSEMBLED,

That there shall be at the seat of government an executive department to be known as the Department of Health, and a Secretary of Health, who shall be the head thereof, who shall be appointed by

the President, by and with the advice and consent of the Senate, who shall receive a salary of \$12,000 per annum, and whose term and tenure of office shall be like that of the heads of the other executive departments; and Section 158 of the Revised Statutes is hereby amended to include such department, and the provisions of Title 4 of the Revised Statutes, including all amendments thereto, are hereby made applicable to said department. The said Secretary shall cause a seal of office to be made for the said department, of such device as the President shall approve, and judicial notice shall be taken of said seal.

SEC. 2. That there shall be in said department an assistant to the secretary, known and designated as director-general, who shall be a competent physician and a skilled sanitarian, to be appointed by the President, by and with the advice and consent of the Senate, who shall receive a salary of \$7,500 per annum, and whose term and tenure of office shall be for six years. He shall perform such duties as shall be prescribed by the secretary or required by law. There shall also be one chief clerk, and a disbursing clerk and such other clerical assistants as may from time to time be authorized by Congress. And the auditor for the state and other departments shall receive and examine all accounts of salaries and incidental expenses of the office of the Secretary of Health and of all bureaus and offices under his direction, all accounts relating to the Public Health and Marine-Hospital Service, the Bureau of Chemistry, the Bureau of Vital Statistics, the Bureau of Meat Inspection, or other bureaus which may be transferred to the Department of Health by executive order, as is provided for by this act, and to all other business within the jurisdiction of the Department of Health, and shall certify the balance arising thereon to the Division of Book-keeping and Warrants, and send forthwith a copy of each certificate to the Secretary of Health.

SEC. 3. That it shall be the province and duty of said department to foster and promote, by inquiries or otherwise, and develop all matters pertaining to the public health; to collect and diffuse information relating to or affecting the public health; to advise the several departments of the government, the executives of the several states and territories, and all the health authorities of the several states and territories and the District of Columbia and the dependencies on all matters pertaining to the public health, when in his opinion such advice may tend to the preservation and improvement of the health of the people, to secure the best sanitary condition of vessels, their cargoes, passengers, and crews, from foreign and domestic ports; to prevent the introduction of contagious and infectious diseases into the United States and their spread from any state or territory or the

District of Columbia; on request of the executive of any state or territory or the District of Columbia to co-operate with and aid state, territory, district, and municipal health authorities in the execution and enforcement of such needful rules and regulations as are deemed by him necessary to suppress or prevent the spread of contagious and infectious diseases; and, in general, the Department of Health shall be the medium through which the government shall adopt such measures or take such action as will most effectually protect and promote the health of the people of the United States and its dependencies.

SEC. 4. That the office of the surgeon-general of the Public Health and Marine-Hospital Service and the corps of officers and personnel of the Public Health and Marine-Hospital Service, now and heretofore under the jurisdiction of the Department of the Treasury, be, and the same hereby are, transferred from the Department of the Treasury to the Department of Health, and the same hereafter shall remain under the jurisdiction and supervision of the last-named department; and that the chief and the Bureau of Vital Statistics of the Census Office, and all that pertains to the same, be, and the same hereby are, transferred from the Department of Commerce and Labor to the Department of Health and henceforth shall remain under the jurisdiction and supervision of the latter; and the following-named bureaus of the Department of Agriculture: that part of the Bureau of Chemistry charged with the investigation of the adulteration of foods, drugs, and liquors and engaged in the enforcement of the Act of Congress approved June 30, 1906, the chief of the bureau and all that pertains thereto, and that part of the Bureau of Animal Industry charged with the inspection of live cattle and hogs and carcasses and products thereof which are subjects of interstate and foreign commerce, the chief of the bureau and all of said bureau which pertains thereto, be, and the same hereby are, transferred to the Department of Health, and the same hereafter shall remain under the jurisdiction and supervision of the last-named department.

SEC. 5. That all the duties, powers, authority, and jurisdiction, whether supervisory, appellate, or otherwise, now imposed on the Secretary of the Treasury by acts of Congress relating to the Public Health and Marine-Hospital Service, to the enforcement of quarantine, and for the suppression of epidemic diseases; and now imposed on the Secretary of Commerce and Labor by acts of Congress, relating to the Bureau of Vital Statistics of the Census Office; and now imposed on the Secretary of Agriculture by acts of Congress, relating to that part of the Bureau of Chemistry charged with the investigation of the adulteration of foods, drugs, and liquors and engaged in the enforcement of the aforesaid Act of June 30, 1906, and relating to that part

of the Bureau of Animal Industry charged with the inspection of live cattle and hogs and carcasses and products thereof, shall be, and the same hereby are, transferred to and imposed and conferred on the Secretary of Health.

SEC. 6. That the Secretary of Health is hereby given power and authority to rearrange the work of the bureaus and offices confided to said department, and to consolidate the statistical bureaus and offices, and the Secretary of Health shall also have authority to call on other departments of the government for statistical information so obtained in such manner as to him may seem wise. That the official records and papers now on file in and pertaining exclusively to the business of any bureau, office, department, or branch of the public service in this act transferred to the Department of Health together with the furniture now in use in such bureau, office, or department, or branch of the public service, shall be, and hereby are, transferred to the Department of Health.

SEC. 7. That the President be, and hereby is, authorized by order in writing to transfer at any time the whole or part of any office, bureau, division, or other branch of the public service engaged in statistical or scientific work which relates to and is germane to the public health to the Department of Health, except those of the Department of War and the Navy, and in every such case the duties and authority performed by and conferred by law on such office, bureau, division, or other branch of the public service, or part thereof, which is transferred, and all the power and authority conferred by law, both supervisory and appellate, on the department from which such transfer is made, or the secretary thereof, in relation to said office, bureau, division, or other branch of the public service, or the part thereof so transferred, shall immediately, when such transfer is ordered by the President, be fully conferred on and vested in the Department of Health or the secretary thereof, as the case may be, as to the whole or part of such office, bureau, division, or any branch of the public service so transferred.

SEC. 8. That there shall be an advisory board for the Department of Health. Said board shall consist of three competent experts, to be detailed from the Army, Navy, and the Bureau of Animal Industry by the Surgeon-General of the Army, the Surgeon-General of the Navy, and the Secretary of Agriculture, and one versed in law to be detailed from the Department of Justice by the Attorney-General, respectively (which experts, together with the chiefs of the bureaus of the Department of Health, shall be ex officio members of the board, and serve without additional compensation), and eight other members who shall be appointed by the Secretary of Health, who shall be com-

petent experts, and not in the regular employment of the government. The said eight members shall each receive compensation of \$20 per diem while serving in conference, as aforesaid, together with allowance for actual and necessary traveling expenses and hotel expenses while in conference. The term of service of the eight members of said board not in the regular employment of the government, first appointed, shall be so arranged that two of said members shall retire each year, and subsequent appointments shall be for six years. Appointments to fill vacancies occurring in a manner other than as above provided shall be made for the unexpired term of the members whose place has become vacant. The duties of said board shall be to consult with the secretary relative to investigations to be inaugurated in the department and the methods of conducting the same, to formulate, for the secretary's approval, the rules and regulations to be observed in maritime and interstate quarantine, to formulate opinions on subjects referred to it by the secretary, and to participate in conferences held by the Secretary of Health with the health authorities of states and territories and the District of Columbia; and so much of the act approved July 1, 1902, which relates to an advisory board for the Hygienic Laboratory is hereby repealed.

SEC. 9. That the Secretary of Health shall call an annual conference of the health authorities of all the states and territories and the District of Columbia, said conference to be held in the city of Washington, and each of the said states, territories, and the District of Columbia shall be entitled to send one delegate from its health department. And each delegate from said state or territory or the District of Columbia so attending a conference called by the Secretary of Health, shall be entitled to receive an allowance for actual and necessary traveling expenses and hotel expenses, not exceeding five days, exclusive of days necessarily spent in travel: Provided, That when in the opinion of the Secretary of Health, the interests of the public health would be promoted by a conference of one or more health authorities of states and territories with himself, he may invite such states and territories as he may deem necessary to send one delegate from each of the health departments to participate in such conference: And provided further, That it shall be the duty of the Secretary of Health to call a conference on application of not less than five state or territorial boards of health, and each of said states and territories and the District of Columbia joining in such request shall be entitled to send one delegate.

SEC. 10. That the Secretary of Health, after conference with the advisory board, may cause investigations to be made into the nature, origin, and prevention of contagious and infectious diseases,

epidemics, and other diseases, in the United States and its dependencies, and, if necessary, in foreign countries, and may appoint commissions of experts from the Department of Health or experts not in the regular employment of the government to make such investigation as may in his judgment seem wise.

SEC. 11. That the President is hereby authorized, when requested by the Secretary of Health, and when the same can be done without prejudice to the public service, to detail officers from the several departments of the government for duty under the direction of the Secretary of Health to carry out the provisions of this act, and such officers while so detailed shall receive no additional compensation except for actual and necessary expenses incurred in the performance of such duties.

SEC. 12. That the Secretary of Health shall annually, at the close of the fiscal year, make a report in writing to Congress, giving an account of all money received and disbursed by him and his department in fostering and promoting the public health, and in matters relating thereto. He shall make special reports as he may be required to do by the President, or either house of Congress, or which he himself may deem necessary and urgent.

SEC. 13. That, except as expressly provided for by this act, nothing herein contained shall be construed as limiting or abrogating any function, right, or duty now imposed by law on any existing bureau; but such bureaus and parts of bureaus as are by this act transferred to the Department of Health shall continue, under direction of the Secretary of Health, to have such functions, duties, and rights as they have at the time of such transfer, and such parts of bureaus as are not transferred, in those cases where a part only is transferred, shall continue to have such functions, duties, and rights as they would have had if this act had not been passed.

SEC. 14. That the sum of.....dollars be, and is hereby, appropriated to carry the provisions of this act into effect.

SEC. 15. That all acts or parts of acts inconsistent with this act are hereby repealed.

SEC. 16. That this act shall take effect on and after July 1, 1911.

NEUROTIC ANOREXIA.

While loss of appetite and nausea are usually symptoms of a host of diverse pathological conditions, they sometimes constitute a disease in themselves—a kind of neurosis. In these cases the physician will find Gray's Glycerine Tonic Comp. of almost specific value for restoring the impaired appetite. It is not only agreeable to take, but produces its benefits at once in such a natural way that before the patient realizes it, the normal amount of food is being taken. Its efficacy in these neurotic cases makes Gray's Glycerine Tonic Comp. exceedingly useful in relieving the severe nausea that often occur in early pregnancy.

Book Reviews.

Progressive Medicine, Vol. 4.

Volume 4 of Progressive Medicine is certainly a commendable work. The Diseases of the Digestive Tract and Allied Organs by R. S. Lavenson, is a most comprehensive and up-to-date work beginning with atony of the Esophagus and passing on through the various stages and conditions, which may finally become chronic or malignant. In a like manner, he handles the diseases of the stomach, discussing at some length the ingredients of the gastric juice, particularly the question of hyperacidity as effecting healing processes more particularly in ulcerative conditions. He also reviews recent literature relative to malignancy, urging the necessity for more careful diagnosis. He, likewise, reviews recent literature on Duodenal ulceration, constipation, appendicitis, the Peritonem, Liver and Pancreas.

Diseases of the Kidneys are discussed by John Rose Bradford, beginning with the distribution of the Renal Arteries and passing on to the effect of Renal diseases upon the suprarenal glands. The function of the Glomerulus; Dropsy; Origin of Urinary Calculi; Urinary Aubeplies and the Supernumerary Kidney.

Dr. Chas. W. Bonney reviews the work of the past year in Genito-Urinary diseases, beginning with functional diagnosis discussing the preliminary report on the phenol-sulphone-phthalein test, as compared to other similar tests for the function of these organs, he goes on to diseases of kidneys and ureter, bladder and prostate.

Under surgery of the extremities, shock, anesthesia, infection, fractures, dislocations and tumors, Dr. Joseph C. Bloodgood reviews recent literature together with his own extensive experiences using the following divisions: 1. Injuries. 2. Infections. 3. Tumors. 4. Lesions of special Tissues. 5. Lesions of special Glands. 6. Lesions of special regions. These are further subdivided so as to cover the subjects in as complete manner as possible.

Under practical Therapeutic Referendum, Dr. H. R. M. Landis discussed the use of Adalin, a new sedative and hypnotic. Alum baths in Typhoid to minimize skin complications; arsenic in Organic nervous diseases; the treatment of inoperable cancer with various normal and abnormal body fluids and with cancerous ascitic fluids; treatment of gastric ulcer with atropine; as well as many other drugs. He considers climate, diet, dry heat, exercise and rest, massage, glandular extracts, hydrotherapy and serum therapy.

This volume reflects credit to its author as a most commendable work.

F. Y. G.

Case Histories in Pediatrics.

BY DR. J. L. MORSE, ASSISTANT PROFESSOR OF PEDIATRICS,
HARVARD MEDICAL SCHOOL.

Dr. Morse has chosen from his experience the histories with clinical findings of one hundred patients, illustrating the important affec-

tions of infancy and childhood, as they present themselves to the physician in practice. The cases are reported in an interesting and concise manner. Their differential diagnosis is straight to the point, and in the weighing of the value of clinical data there is the crystallization of large experience.

In the discussion of any one of these cases, the practitioner is sure to find something to help him to a better understanding of his younger patients.

F. P. W.

Infections of the Hand. A Guide to the Surgical Treatment of Acute and Chronic Suppurative Processes in the Fingers, Hand and Forearm.

BY ALLEN B. KANAVAL, M. D.,

Assistant Professor of Surgery, Northwestern University Medical School, Chicago, Octave, 447 pages, with 133 illustrations. Cloth, \$3.75, *net*. Lea & Febiger, Philadelphia and New York, 1912.

Dr. Kanavel, in a volume of some four hundred odd pages, presented facts concerning infections of the hand, based on experimental and anatomical investigations which are not difficult to master and to successfully apply.

The book contains numerous photographs, cuts and schematic drawings of frozen sections which leave nothing to the imagination.

The chapter on "Diagnosis and Treatment in General," enables one who is in doubt to classify his case. This accomplished, there remain many other chapters which go into the details of each variety.

In treatment, Dr. Kanavel has in many instances abandoned classical methods. This is particularly noticeable as to sites selected for incision. A close study of his experiments together with case records where his methods are employed are convincing proofs of their justification.

Since the sequelae of hand infections are so often fatal and always disfiguring, this book which so thoroughly covers these conditions ought to be in the possession of every man who treats these conditions surgically.

M. C. W.

The Physician's Visiting List.

(Lindsay & Blakiston's)
1912.

Published by P. Blakiston's Son & Co., Philadelphia.

A visiting list for 25 patients per week with special memoranda pages.

Compact, simple, contains new utero-gestation table.

Can be obtained in monthly, yearly and perpetual editions.

M. C. W.

Abstracts of Current Literature.

UNDER THE CHARGE OF THE MEDICAL REVIEW CLUB
OF PORTLAND.

American Journal of Obstetrics. October 1911.

Posture of the Lying-in Patient.

BY GEORGE C. MOSHER, KANSAS CITY, MO.

The writer contrasts the methods of the Germans of the present day with those of the obstetricians in our own country as to having the woman remain in bed after delivery. After citing several instances of German hospital statistics wherein at least 64% of the cases were up and about on the third day, and quoting from authorities that it was considered beneficial, when taken together with the gymnastic exercises which they practiced, and that a badly torn perineum was considered the only contra-indication, the writer presents a summary from some of the leading obstetricians of this country as to their beliefs and methods. The average shown here is not less than nine days in bed, and stress is laid upon the fact that the general condition of the individual patient must govern the conduct of the case, influenced also by the amount of involution of the uterus, and the pinkness of the discharge.

Simplified Infant Feeding.

ROGER R. DENNETT. NEW YORK.

This is a statement by one who has used the varying "fads" in infant feeding of a more simple method that he has tried with good results. Realizing that a child will gain upon a mixture of whole milk and sugar proportionate to its weight, he has found that of a 4% milk, an infant requires twice as many ounces as he weighs in pounds, and that for a baby over one month $1\frac{1}{2}$ ounces of sugar is a fixed proper amount for the 24 hours. To this is added the amount of water to make the necessary number of feedings of the correct size, generally allowing 1 ounce more than the baby is months old to each feeding. This simple rule applies to all babies not in the following four classes:

1. Infants under one month.
2. Fat babies over 8 months.
3. Atrophic or marasmic babies.
4. Babies with digestive disturbances.

In the first class, the writer advises one and one-half times as much milk in ounces as he weighs in pounds, with one ounce of sugar; for the second class, decrease the amount of milk or of sugar; for the third, increase the value of the food; and for the fourth, modifications to individual needs, of which he gives examples.

Inorganic Constituents of Foods in Nutrition of Infants and Children.

ELIAS H. BARTLEY, BROOKLYN, N. Y.

The author claims that one reason why milk is such a necessary food after weaning, is because of the inorganic salts therein, and that these should not be regarded as accidental substances, but as important to the growing child as fat, protein or carbohydrates, as shown by grave nutritional disturbances when they are lacking or wrongly balanced. Grouping the ways in which these salts serve the body as, (1) giving permanence to skeleton, (2) being essential to cellular protoplasm, (3) regulating osmotic processes, and (4) regulating nervous and muscular tonus, he takes up in detail the work of various inorganic elements, and presents a synopsis of the foods where each may be found.

H. J. EVERETT.

Journal American Medical Association, December 30, 1911.

The Baby Tents of Chicago.

BY FRANK W. ALLIN, M. D.

This article takes up the summer baby-tent phase of the great propaganda for the reduction of infant mortality. Two ideas are combined: the necessity of pure milk and the need of fresh air.

A study of Chicago deaths in April, shows a steady increase in the mortality among infants for each successive day of hot spells, and deaths mostly in crowded districts where the supply of fresh air is necessarily restricted; consequently, tents were located in areas where deaths were most numerous, and were open from 8 A. M. until 6 P. M. from July 1st to September 15th. Only during the very hot spells were they kept open at night and on Sunday. The tents were situated on roofs and in vacant lots. The tents had double roofs and were screened. One or more nurses were in attendance, and a milk station was conducted at each place. An interne was present for half the day or so, and prepared histories, examined patients and eliminated babies with contagious affections. A physician visited each station daily.

During the first season, 7 years ago, 60 babies were cared for in this manner. During this last summer, 1,750 babies were treated in 11 tents. At least 7 other cities now employ this method of preventing infant mortality.

FRED P. WEBSTER.

Surgery, Gynecology and Obstetrics for November, 1911.

Physiological Principles in the Treatment of Acute Peritonitis.

BY JOHN L. YATES, PH. B., M. D. OF MILWAUKEE, WIS.

The author presents his views on this hackneyed and thread-bare subject, based on the observation of over one thousand cases of acute peritoneal infection. These were observed largely in the service of Dr. Ochsner and many others experimentally induced in animals. He

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The need of many children for cod-liver oil has been met with marked success by Hydroleine. They take it willingly; they—as well as adults—like its distinctive nutty flavor. Hydroleine is also exceptionally digestible. While its scope of usefulness is widened by its palatability and digestibility, it is always notably dependable.

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draws certain conclusions based upon what he believes to be the physiological process of body defense in such affections and the rational therapy to be carried out. First describing the usual picture of hyperemia when the peritoneum is affected by any cause, chemical, physical or bacteriological, he calls attention to the excessive outpouring of serum, almost gushing forth, with the usual deposit of fibrin in less than four hours and the encapsulation of the irritant in normal cases is about six hours. This outpouring of serum flows some distance from the point at first involved, carrying with it some of the irritant, but in a much diluted and less

virulent form. This diffuse purulent exudate spreading over the peritoneum is by no means a positive proof of an underlying peritonitis, but may be actually sterile leucocytes and wholly unirritating. Acute general peritonitis, he regards, an exceeding rarity, the victim usually succumbing before any such extensive involvement is reached. The area of peritoneum, he estimates, is about ninety-eight per cent of the area of the skin surface.

As to diagnosis — inspection is valuable, palpitation valuable, but dangerous if forceful or needless, and auscultation extremely valuable but most often neglected.

Prognosis — Greatest danger lies in the degree and rapidity of the first absorption.

Treatment — Limitation — This may be accomplished by early operation and the correction of the underlying condition, by controlling peristalsis. Measures toward this end — bodily quiet, hot or cold applications, absolute gastro-intestinal rest, not even water being allowed by mouth. Laxatives and feeding, the most dangerous procedures, will often convert a mild into a fatal case of peritonitis.

As to posture, — keep affected part at a lower level. Would not put an upper abdominal peritonitis in high head position any more than would elevate the foot of the bed in pelvic involvement. The time was when none but the skilled abdominal surgeon could recognize a beginning peritonitis and as a heritage of this, the "Don't Give Opium, it masks the symptoms," dictum arose, this has long outlived its usefulness. Peristalsis is the great bugbear and should be limited at once by large and efficient doses of opium or by gastric lavage if a meal has been ingested, the lower bowel to be cleared by non-irritating enemas. Morphine insures bodily comfort, lessens respiration and peristalsis, diminishes the danger to tympanites and permits the continuous slow introduction of water by the lower bowel to be retained.

Operation but an incident in the treatment of peritonitis. Believes in the greatest possible limitation of drainage as the adhesions caused by peritonitis are much more evanescent than those induced by the irritation of a foreign body.

H. A. MILLIKEN.

The American Journal of the Medical Sciences.

Is there a Specific Treatment for Diabetes Mellitus?

BY HENRY SEWALL, PH. D., M. D.

The writer says that the brilliant results promised by different measures in the treatment of diabetes at the onset of certain cases have been disappointing after a thorough trial. The treatment outlined in this paper is based upon the fact that muscle substance contains a glycolytic ferment capable of converting glucose or glycogen into lactic acid, carbon dioxide and alcohol.

He uses a beef juice prepared as follows: One pound of lean beef ground, placed in a jar of cold water, to which are added thirty drops of hydrochloric acid. The mixture stands in an ice box for twelve hours and is then strained through cheese-cloth. The beef juice should be taken during the course of the day, one-half to one tumblerful at a time.

The results obtained by this method indicate that in a certain proportion of diabetics beyond middle age the metabolism and general symptoms may be improved, also the urine become sugar free, temporarily at least.

In a single case, a child of seven, the administration of the beef juice had no effect upon the disease, neither did a pancreatic infusion given alone, but if both were given together, one following the other at an interval of an hour or two, the urine became sugar free. After the disease had persisted for some months, this result could no longer be obtained, although the administration of the beef juice seemed to improve the subjective condition of the patient.

A. H. WEEKS.

County News.

CUMBERLAND.

The regular meeting of the Cumberland County Medical Society was held at the Congress Square Hotel, the evening of Friday, February 16, 1912.

The paper was read by Dr. Harvey Parker Towle of Boston, Professor of Dermatology at Dartmouth Medical School, and his subject was: "The Newer Methods of Treating Diseases of the Skin with especial reference to Vaccines and Salvarsan."

A Dutch Lunch was served after the paper.

PHILIP P. THOMPSON, *Secretary*.

PORTLAND MEDICAL CLUB.

The second meeting of the year was held at the Columbia Hotel, Thursday evening, February 1. There were nineteen members present. After the transactions of routine business, Drs. Turner and Rogers reported interesting cases of small children with Diabetes. Dr. Swasey reported cases of good effects from the use of combined serum in posterior Urethritis.

The paper of the evening was by Dr. O. E. Haney, subject, "Eclampsia." The essayist presented the subject in the form of lessons to be drawn from cases in his own practice. The paper was very complete and interesting and evoked a very general discussion.

H. J. EVERETT, *Secretary*.

WESTBROOK MEDICAL CLUB.

The regular meeting of the Westbrook Medical Club was held at the home of Dr. L. L. Hills.

A very interesting paper was read by Dr. Willis Bean Moulton, 622 Congress Street, Portland.

The subject of his paper was "Vaginal Discharges and their Significance."

A discussion followed the reading of the paper in which the members of the Club all took a lively interest.

F. L. FERREN, *Secretary*.

ANDROSCOGGIN.

The regular meeting of the Androscoggin Medical Association was held on Tuesday, February 6th.

Instead of the usual paper there was a discussion of cases which was greatly enjoyed by a large attendance.

It was voted to devote the April meeting to the question of Cancer.

JOSEPH SCANNELL, *Secretary*.

THE RESEARCH MEDICAL CLUB.

The Research Medical Club held its Annual Ladies' Night on Wednesday evening, January 31st. It was a very pleasant affair.

KENNEBEC.

AUGUSTA MEDICAL CLUB.

The Augusta Medical Club met February 12th at Weaver's restaurant. Dr. A. H. Sturtevant entertained. The paper of the evening was presented by Dr. B. D. Ridlon, Chief Surgeon of the National Soldiers' Home, Togus, on "Organic Diseases of the Heart." Dr. H. W. Miller presented a pathological specimen of a heart rupture, which was the result of an anemic necrosis. Sixteen members were present.

H. W. MILLER, *Secretary*.

KNOX.

The regular meeting of the Knox County Medical Society was held February 13th at the Thorndike Hotel, Rockland.

An interesting paper on "Diagnosis and Treatment of Gall Stones," was read by Dr. W. M. Spear and greatly enjoyed by the members present.

A. W. FOSS, *Secretary*.

PENOBSCOT.

The monthly meeting of the Penobscot County Medical Association was held at the Bangor House, Tuesday, February 20th.

Dr. A. L. Chute of Boston, gave a paper on "Recognition and Treatment of Common Surgical Diseases of the Kidneys."

Business meeting was held at 7.30. Supper at 8.

JOHN B. THOMPSON, *Secretary*.

YORK.

The next meeting of the York County Medical Society will be held early in April. This will be an important session, and it is hoped that there will be a large representation of physicians from all parts of the County. The physicians in York County are greatly scattered, and it is difficult for many of them to attend regularly the quarterly meetings. Some are in favor of having the April meeting in Kennebunk, which is a fairly central location.

ARTHUR L. JONES, *Secretary*.

PERSONAL NEWS AND NOTES.

Dr. J. D. Cochrane of Saco has recovered from an operation for appendicitis at the Webber Hospital, Biddeford, the middle of January.

Dr. J. D. Butler, who has been located in Biddeford for about three years, has removed to New Market, N. H.

A mal-practice suit against Dr. E. D. O'Neill of Biddeford was tried before Justice George F. Haley, at the January term of the Supreme Court held in Saco. It was a case of Colles fracture, the plaintiff being a Frenchman nearly 60 years of age. Drs. Gerrish and Bassford of Portland and Goodrich of Waterville gave expert testimony. The verdict was for Dr. O'Neill.

Dr. Charles Bray of Portland is spending a month in the South on a hunting trip.

Dr. William Moran of Portland is spending a few weeks in Florida.

Dr. D. J. Clough of Portland left this month for a vacation trip through the middle West and South.

We are glad to note the Provision in the Will of Almira K. Hasty of Portland which leaves the residue of the estate to be created into a trust from which the public bequests are taken and the balance made into what is to be called the Elihu Hasty Fund for the use of the Medical School of Maine. We hope to see more and larger provisions made in the near future.

Dr. H. A. Milliken of Hallowell, has been nominated Republican Candidate for Mayor.

Dr. Cousins of Portland, has returned from Baltimore where he has been attending a Complimentary Dinner given to Dr. Finney of the John Hopkin's Hospital.

MAINE EYE & EAR ASSOCIATION.

Arrangements are in progress for a meeting to take place some time the middle of March. Any member of the Maine Medical Association who wishes to attend, kindly notify Dr. A. H. Little, Secretary, Portland. Programs will be sent out in due season.

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THE JOURNAL

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The Journal assumes no responsibility for opinions expressed by the authors.

VOL. II.

APRIL, 1912.

No. 9

THE TREATMENT OF CHRONIC ULCER OF THE DUODENUM AND STOMACH*.

BY CHARLES L. SCUDDER, M. D., BOSTON, MASS.

THE IMPORTANCE OF THE SUBJECT. "The rarity of gastric disease!"

Years of distressing dyspeptic symptoms, of chronic invalidism, of increasing disability, the loss of work time, the great expense.

FREQUENCY OF ULCER IN GENERAL.

In Germany, 5 per cent of the population are suffering from chronic ulcer.

THE ETIOLOGY OF ULCER UNKNOWN.

Various hypotheses: an infection; an embolism.

NO GREAT DIFFERENCES IN DUODENAL AND GASTRIC ULCERS.

TWO TYPES OF ULCER:

- (1) Non-indurated, soft, mucous, peptic, medical, ulcer.
- (2) The indurated ulcer.

Our knowledge of the soft ulcer has not been advanced by surgery. It is the medical ulcer. It is associated with atypical symptoms. It is the ulcer which medical treatment cures. It may leave no permanent sign of its existence.

The chronic, indurated ulcer has been opened to daylight by the surgeon. Our knowledge of ulcer in the past has been based upon gross post-mortem pathology. Our knowledge of chronic ulcer today is based upon operating-room surgical findings. The ulcer has been felt and seen and its effects noted by surgeons upon the living. A living pathology has supplemented the dead pathology.

*Read before the 59th Annual Meeting of the Association, at Augusta, June, 1911.

LOCATION OF ULCER.

Three-fifths of all ulcers are in the duodenum. Seventy-five per cent of the ulcers of the stomach are in the grinding or pyloric portion.

Duodenal ulcer occurs in men more often than in women. Gastric ulcer occurs about alike in the two sexes.

The duodenal ulcer may extend beyond the pylorus into the stomach.

The gastric ulcer may rarely extend into the duodenum.

An ulcer may exist in the duodenum and stomach at the same time.

Most gastric ulcers involve the lesser curvature of the stomach, extending anteriorly and posteriorly like a saddle.

The duodenal ulcer is most always seated in the upper inch and a half of the duodenum and extends up to three-quarters of an inch of the pyloric sphincter.

SYMPTOMATOLOGY.

Appetite good, nutrition good, food gives immediate relief to pain, distress in epigastrium, gas, sour eructations, nausea, vomiting. These symptoms constitute the gastric syndrome of Hartmann, and are seen in early duodenal and gastric ulcer.

These symptoms appear in attacks with varying intervals of comparative health between attacks. These symptoms exist over long or short periods of time, with remissions.

The above is true until complications have arisen. Each attack is one-half a cycle. Each interval is one-half of a cycle. Both attack and interval are necessary to complete the picture. The attacks become more frequent, the intervals shorter, the symptoms actively more severe, until either symptoms of obstruction are present, or hemorrhage appears, or perforation takes place, or malignant disease is evident.

The diagnostic importance of this syndrome of symptoms is not apparent in their chronicity nor in their periodicity. Neither is the diagnosis apparent in the degree of pain, nor in the location of the pain, nor in any one of the symptoms of the gastric syndrome alone, but the diagnosis lies in three important considerations, viz., the time of the appearance of the symptoms with reference to the taking of food; in the regularity in the appearance of these symptoms with reference to the taking of food; in the control of these symptoms by the control of the pain by means of alkalies, food, drink, stomach washing, and vomiting.

The symptoms of gastric and duodenal ulcer may be latent. In such cases the acidity may be low, the motility of the stomach normal. There will be no gradual peritoneal involvement, and the first evidence of ulcer may be a perforation of the duodenum or stomach or severe hemorrhage from a duodenal or gastric ulcer, or the sign of acute gastric cancer. (*Vide* gastric carcinoma lecture.)

The syndrome of symptoms given above, when terminal conditions such as hour-glass stomach or pyloric obstruction are present, will be somewhat masked and one may find the following picture: no relief from food, positive harm from food, a residue of food in the stomach, evidence of fermentation in the stomach, vomiting of retained food, blood in the vomitus, tumor formation if there has been sufficient infiltration.

Given then, a man of middle life, in good flesh, well-nourished, with a keen appetite, who has lost some weight, who is constipated, who has had "spells" of stomach trouble for months or years with intermissions of fair health, these

"spells" recurring and increasing in severity, with symptoms modified by food ("hunger pain"), alkalies, drink, vomiting and irrigation, the chances are that this man has an ulcer in the duodenum or stomach.

With regard to the *location of the ulcer*, if the pain is intense, with limited radiation, if relief from food is positive, if there is high acidity, if there is much gas, if the vomiting relieves, if there is tenderness over the median line and duodenum, the chances are that the ulcer is duodenal; otherwise, it is probably in the pyloric portion of the stomach. A duodenal ulcer is more apt to be latent than gastric ulcer.

The *complications* of ulcers of the duodenum and stomach are (1) *perforation*, (2) *hemorrhage*, (3) *malignant degeneration*, (4) *obstruction*.

(1) The *perforation* may be acute, subacute or chronic.

Ninety-five per cent of perforations as a whole are fatal without surgical treatment. In the *acute perforation*, the ulcer perforates suddenly, and usually when the stomach is full. The result is, of course, disastrous.

In the *subacute perforation*, the ulcer often perforates on an empty stomach, the ulcer may be closed by adhesions and by omentum. There may be premonitory peritoneal signs.

If the ulcer has perforated slowly, perigastric adhesions will be formed. The escape of gastric contents is delayed and a localized abscess is formed.

The acute and subacute perforations most often occur through the anterior abdominal wall; the chronic perforations occur usually through the posterior abdominal wall. Perforations anteriorly are more common than posterior perforations.

Ninety-two per cent of the perforations of the duodenum occur on the anterior and free portion of the duodenum near to the pylorus. A perforated duodenal ulcer may simulate acute appendicitis. Reasons for this.

The *signs* of perforated ulcer will be the signs of sudden acute peritonitis: Collapse, abdominal pain and tenderness and rigidity of the abdominal wall.

In twenty per cent of cases, perforation occurs at two or more points.

The *prognosis* is influenced by the time of operation after the perforation has occurred. The mortality rises rapidly after the first twenty hours. Kirk has had eleven recoveries in eleven cases, all operated upon within twenty hours.

The prognosis is influenced by the virulence of the infection. The duodenal contents are sterile.

The prognosis is influenced by the size of the opening and by the presence or absence of food in the stomach.

Perforated chronic ulcers of the duodenum tend to heal themselves. Importance of this fact.

TREATMENT OF THE PERFORATION.

Suture the opening, use omental graft, look for second opening, irrigate abdomen if necessary, drain with rubber tissue if necessary, do a gastro-enterostomy if likelihood of obstruction either primarily or secondarily. Always search for a second perforation.

If suture, excision, or resection are impracticable, wash out stomach, do a jejunostomy or a duodenostomy, and drain the region of the wound.

SUBPHRENIC ABSCESS. DEFINITION.

One-third of subphrenic abscesses are occasioned by perforated duodenal or gastric ulcers. One-sixth of the cases are due to appendicitis. *Diagnosis*: The history, onset, local signs of suppuration, thoracic signs. *Prognosis* is

bad. *Treatment:* Laparotomy. Drainage through most advantageous route.

(2) *Hemorrhage.* Hemetemeses. Melena. Fifty per cent to eighty per cent of ulcers bleed. Five per cent to ten per cent of bleeding ulcers are fatal. Eighteen per cent die suddenly. Operation is of no avail. In four-fifths of the fatal cases hemorrhage is from large vessels and in fifty per cent of the fatal cases from the splenic artery.

Capillary oozing seen in anemic young women is from mucous erosions and small fissures. The treatment is usually medical.

Ninety per cent of the hemorrhages of the stomach are from chronic ulcer. Arterial bleeding is usually from chronic ulcer.

Site of the bleeding determined by the place of the appearance of the blood and the character of the blood.

Hemorrhage from chronic ulcer may be (1) acute, ending in death; (2) severe and recurring and may prove fatal; (3) slight and recurring and may lead to anemia.

TREATMENT OF HEMORRHAGE.

Medical treatment, rest, diet, hot water lavage, arrests 95 per cent of the capillary ooze.

Operation is contra-indicated during active bleeding. After a second fairly severe hemorrhage, especially if there is present an ulcer history of "chronic indigestion," operation should be done without delay, particularly if there is a history of ulcer, for from experience it is known that other hemorrhages will almost certainly follow.

In 1882, Rydgies suggested surgical intervention in gastric hemorrhage.

In 1887, Mikulicz operated first for hemorrhage from gastric ulcer.

Roux did the first successful operation for gastric hemorrhage from ulcer.

Gastro-enterostomy will not cure hemorrhages from a large vessel. Cases are reported of fatal hemorrhage following gastro-enterostomy.

SURGICAL PROCEDURES FOR HEMORRHAGE ARE DIRECT OR INDIRECT.

Direct: (1) Excision of ulcer; (2) ligation of ulcer; (3) cauterization of ulcer; (4) ligation of mucosa.

Indirect: Gastro-enterostomy. The direct method is often inapplicable and may prove rather ineffective. The indirect is the operation of choice.

(3) MALIGNANT DEGENERATION OF GASTRIC ULCERS.

Cruveilhier, 1839; Rokitansky, 1849; Hauser, 1883; and Wilson, 1910, record the evidence for the development of cancer of the stomach upon a pre-existing chronic ulcer.

The latest returns from the pathological laboratory demonstrate that of 153 cases of resection of the stomach for carcinoma, 109 cases, or 71 per cent. show unmistakable evidence of previous ulcer.

Carcinoma is less likely to occur in ulcer of the duodenum than in ulcer of the stomach. Only about six cases of carcinoma are recorded in duodenum. Clinically, at the operating table, it is often difficult to distinguish between chronic ulcer and cancer. The malignant degeneration of chronic ulcer is one factor suggesting the excision of gastric ulcer.

(4) OBSTRUCTION.

Chronic ulcer may give rise to different forms of obstruction to the passage of food; an hour-glass stomach, if there is a constriction of the lumen of the

stomach itself, or obstruction at the pylorus if the cicatricial tissue resulting from the ulcer is located at the pylorus.

These conditions represent terminal or end conditions. A diagnosis should be made soon enough so that these terminal and end conditions may be avoided.

SURGICAL TREATMENT OF DUODENAL AND GASTRIC ULCER.

Simple duodenal ulcer: Gastro-jejunostomy with folding duodenal wall is applicable to two-thirds of the cases. Simple pyloric stricture without great thickness, a posterior gastro-enterostomy operation, or simple excision may be employed.

A gastric ulcer at some distance from the pylorus, an excision is indicated.

An hour-glass contraction may be completely excised, or a gastro-enterostomy to the proximal pouch done, or a gastro-gastrostomy done. A distinct tumor in the pyloric part of the stomach from indurated ulcer, Rodman's operation of excision may be done, together with a gastro-enterostomy if necessary.

The mortality of these operations is not over five per cent to ten per cent. The cures are about ninety-five per cent.

The mortality of untreated cases of gastric ulcer is from twenty per cent to fifty per cent. The immediate mortality of gastric ulcer under medical treatment is 20 per cent plus. Hemorrhage kills 5 per cent. Perforation kills 15 per cent. Under medical treatment there is always the possibility of the development of a stricture of the pylorus, a dilated stomach, an hour-glass stomach, the development of cancer upon ulcer, a subphrenic abscess, and an anemia.

Stone and Mumford found that 80 per cent of ulcers treated medically are said to be cured. Upon investigation by them farther, one-half of these supposedly cured cases were found to have relapsed. Paterson records 72 cases of gastric ulcer treated medically and less than 27 per cent of them were cured.

THE IMMEDIATE RESULTS OF THE SURGICAL TREATMENT OF CHRONIC ULCER OF THE STOMACH FROM MANY CLINICS.

Guy's Hospital,	47	23%
St. Bartholomew's Hospital,	35	17%
Robson,	112	2 deaths
Mayo,	167	1 death
Moynihan,	246	2 deaths
Moynihan,	151	0 deaths
Deaver,	40	1 death
Deaver,	70	2 deaths
Hartmann,	47	3 deaths
Mayo,	379	4.8%

THE REMOTE RESULTS OF SURGICAL TREATMENT.

Mayo, 234 cases, 80.7 per cent cured, 9 per cent improved.

In cases of chronic gastric ulcer, surgical treatment allows about 95 per cent to recover.

Surgery cures almost all who recover from the operation.

Medicine cures 30 to 40 per cent only.

The medical treatment of chronic duodenal and gastric ulcer is long and uncertain.

The surgical treatment of chronic duodenal and gastric ulcer is rapid and sure.

An exploratory operation should be done more frequently in cases of long-continued gastric symptoms. No operation upon the stomach should be done unless some tangible and demonstrable lesion exists.

A perfected technic and good judgment in the selection of cases for operation are necessary to successful treatment of duodenal and gastric ulcers.

SURGERY OF THE APPENDIX.*

BY H. H. CRANE, M. D., OF BANGOR.

During the past fifteen years, no surgery condition has been more widely, vigorously and, at times heatedly discussed by the medical profession than has appendicitis. Its etiology, pathology, symptoms and treatment, especially the latter, have all been under fire, with the result that many surgeons have changed their views as to the best time and method of operating.

In this paper I shall not attempt to advance anything new or original, nor am I going into the etiology, pathology and the many symptoms of this disease which may be found in any text book on surgery. It is simply an expression of my personal views and opinions after a somewhat extended experience with this disease during the past eight years, and you may take it for what it is worth.

A plea for early diagnosis and early surgical treatment by the simplest method is all that I have to offer.

One would suppose that after all that has been written and said upon the symptoms of appendicitis, that the average general practitioner of medicine would be able to recognize this disease in its early stages and recommend operation while the case is clean — unfortunately this is not so, as we operate almost daily in hospital work upon cases which should have been operated upon at periods varying from one day to two weeks or even months earlier. Practically all of these delayed cases are pus cases of varying degree, — (many with diffuse septic peritonitis), and if the patient is so fortunate as to recover it means weeks or often months of draining pus, possible fecal fistula, extensive adhesions or ventral hernia.

Some physicians always diagnose appendicitis early, with resulting early operation and cure, others, however, are invariably late in recognizing the condition and seem never to be able to acquire immunity. Year in and year out they run along in the same rut, keeping their

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patients from the surgeon until often there is but little life in their bodies — finally sending them to the nearest hospital, where the surgeon has the pleasure (?) of performing two operations at practically the same time — ante, and post mortem.

We all know that many cases of catarrhal appendicitis recover without operation, only to later have another attack which is usually more severe, and the condition upon operation is usually one of extensive and firm adhesions.

SYMPTOMS AND DIAGNOSES.

The typical symptoms as described in the text books are sudden abdominal pain, nausea and early vomiting, rise of temperature and pulse and constipation or diarrhœa.

Pain is usually at first about the umbilicus or general over the abdomen, finally becoming localized in the right iliac fossa with soreness over McBurneys point, with rigidity of the right rectus—the latter two symptoms usually becoming marked during the first twelve hours.

These typical cases are usually early recognized, but there is another class where there is often a delay in diagnosis and this to my mind is the gravest one with which we have to deal. I can best describe it by giving the history of one patient that I have seen during the past year.

Mr. D—, age thirty-five, walked into my office at 8 o'clock one evening saying that he had vomited several times during the forenoon, followed immediately by diarrhœa and slight abdominal pain. His temperature was ninety-eight degrees, pulse seventy-four degrees. Abdominal examination was absolutely negative — no soreness or distension. I saw him again at 7.30 o'clock the next morning and his condition was exactly the same with the exception that he was slightly tender over McBurneys point.

At one o'clock, he was extremely tender over McBurneys point but his pulse and temperature were normal. However, the man looked sick out of all proportion to his symptoms and I operated two hours later, finding a perforated appendix. He made a good recovery. I have seen in the last year nine other cases where the symptoms were almost identical, with the same results.

This is the class of cases not usually recognized early by most of us and is the one that most often proves fatal.

We all have to learn our lessons at some time or other, and I learned mine about seven years ago when my failure to early diagnose a case exactly as I have above described, cost the life of one of my best friends.

WHEN WILL WE OPERATE?

In answer to this question, I say always within twelve hours after seeing the patient, no matter what his condition. This is exactly opposite to the views expressed by many of the ablest operators in the country. These men claim that it is not safe to operate immediately when the patient has been sick thirty-six hours and give as their reasons for delay that adhesions may form and thus limit the condition, or that if there is pus it may be absorbed, that to operate at the time may spread the infection; in fact all sorts of excuses. As a matter of fact these men are careful of their statistics, the cases that die upon their hands after operation are well advertised, those that die without operation are not heard of by the laity, I mean.

Those who advise delay usually follow the Ochsner method of treatment and claim that the shock of operation is too great for a patient who has been sick for three or four days. What, may I ask is the shock of a ten minute operation for peritonitis or appendicitis? Are we to allow these patients to die without making an effort to save them by operation? The Ochsner method is all right in its place and that place is after and not before operation.

I have recently seen four cases die unoperated upon with treatment by this method.

In the Eastern Maine General Hospital, from 1907 to 1910, there were operated upon for acute appendicitis, nine hundred and forty-three cases, without one death, for appendicitis with abscess ninety-one with three deaths and for diffuse septic peritonitis as a result of appendicitis, one hundred and five with twenty-seven deaths.

The man who argues for delay in operating is like one sitting upon a keg of gun powder to which a burning fuse is attached and sits and watches it burn, wondering whether or not he had better put it out or stop to see if it will not go out itself.

As to the methods of operating, they are three, each of which has its advantage, the McBurney incision, the outer body of the rectus and through the rectus.

As to the treatment of the stump, I believe the simplest method is the best, ligation with linen thread and cauterization of the stump with carbolic acid, without invagination.

IN CONCLUSION.

Abdominal pain, no matter where, persisting for twelve hours with or without nausea and vomiting or rise of temperature should be considered to indicate some surgical condition.

Appendicitis should be treated exactly as we treat a strangulated hernia, viz., operate as soon as possible.

DISCUSSION.

DR. F. H. JACKSON, of Houlton:

There are two points of the greatest import in the management of cases of disease of the appendix: EARLY diagnosis and EARLY operation. Careful observation of these two cardinal rules would materially diminish the number of cases, referred to by Dr. Crane, in which the surgeon sees the patient suffering, not from appendicitis, but from some of its terminal states, and regarding the treatment of which there is a difference of opinion among men. Regarding Dr. Crane's method of dealing with the stump, I disagree. Following a clean section for appendicitis there should be no remaining stump; it is not surgical from my standpoint. Surely we do not leave stumps, if we can help it, in removal of tubes; why a stump following an operation from appendicitis? Concerning the use of a non-absorbable suture I personally see no reason for the use of such material. It is my custom to use a very small chromic gut suture and thus there is not left behind any foreign material with its possible danger. Referring again to the method of treating the stump, as practised by Dr. Crane, I know of several instances where this remaining stump has caused serious trouble. In one case, I had to perform a section for intestinal obstruction on account of a stump left by a former operator. While the method is quick, has the sanction of a great many able men, I fail to become alarmed at the possibility of hemorrhage, etc., by following out the method advocated by Halstead in amputating the appendix.

In regard to the method of Ochsner in certain cases, the nature and character of which this well known surgeon carefully describes, it seems to me, judging from my own experience, as well as others, that our best results will be obtained if we carry out the plan he has mentioned. Dr. Crane believes in operation at once, and his position is that of many others, but I believe that his mortality will be lessened, in this class of cases, if he will try Ochsner's method. As we see these cases, they are poor surgical risks, they have been kept under observation, what ever that may mean anywhere from two to fourteen days by men incompetent or unable to make a proper diagnosis and in the greater majority of cases have been fed and purged. My own experience has been most satisfactory in following Ochsner's plan but I would suggest that a careful reading of his method and a strict adherence to the regime he lays down be carried out. Results are what we are striving for and a good result is a live patient.

DR. GORDON:

Mr. Chairman, I want to say a word. I don't agree with Dr. Crane on the use of a non-absorbable ligature in any conditions, I don't care what they are. I haven't used a single ligature or suture since 1884 but cat gut, except the sutures of silkworm gut for abdominal section. I believe no man has a right to put into the abdominal cavity, or anywhere where there is to be buried, any linen or non-absorbable suture. A certain percentage are sure to produce trouble afterwards. I have seen a great deal of this in a great many years. That is my experience, and I believe that it is right. I entirely disagree with my friend from Aroostook in this matter of treatment of the pedicle. I simply tie off the pedicle with a cat gut ligature, cut it down close enough to it so that there will be plenty of hold of the ligature to hold well, and simply use the carbolic acid. I will venture to say that I haven't had a single trouble from that method. This burying the stump by the purse string suture, you simply put it down where it is just as bad as it would be anywhere else, and you

have committed a surgical crime in my opinion by making more suture holes with your needle in doing it.

DR. HAYES:

This is my experience in regard to appendicitis. I have had no experience in operating. My experience has been medical. But this is a point I would like to bring up. I have been unfortunate in having several pus cases which had become emergency cases. These pus cases had had no previous appendix colic, no history of colic, no history of acute catarrhal appendicitis. They came on without any previous symptoms. Now most of my cases have been cases like that, and I have seen several cases which were doubtless appendicitis, catarrhal appendicitis, who for one reason or another preferred to wait, and quite a number of these cases have recovered, or at least there are one or two cases I have in mind where three years have elapsed since they have had an attack, where previously they had had several attacks. The point in my experience is this, that these cases which had become emergency cases had had no previous symptoms of appendicitis.

DR. WILLIAMS:

I was a little drawn out by the remarks of the first speaker on the paper. There is such a thing as a clean appendicial stump. I have proved it in my surgical work. If you want to refine the work, in making an appendicial stump, make a long stump of the mesentery of the appendix and lay it over the stump of your appendix and fasten it there with a small cat gut suture, but don't bury it, because if there is anything the matter, burying it will make an abscess and the peritoneum can't take care of it. If there isn't anything the matter it is perfectly safe to leave it without covering it up at all. But I entirely agree with the speakers, don't ever put in the abdominal cavity any non-absorbable suture material unless—now here is an exception, and that is not in the abdominal cavity either—I prefer silk to sew the fascia after an operation for hernia to any other material and do not have any trouble with it. Once in a great while celluloid linen carefully used is all right, I believe in the abdominal cavity, for I have used it, and seen it used by some of the best surgeons in the United States without any trouble. In regard to diagnosis, I saw a case yesterday similar to one mentioned. The patient was taken Monday morning with vomiting after eating a hearty supper of baked beans. He was attended by a careful physician. He had no soreness in the appendix region. He did have a tenderness, of course, in his bowels—when I saw him his tenderness was on the left side. He had a normal pulse and temperature. The only thing that would make you think it possible that he had had trouble with his appendix was this fact that Monday night, he started for bed and fainted and had a sweating spell after that. But he had no tenderness over the McBurneys point, he had no rise of temperature or rise of pulse. By exclusion and the history of the case we decided it was appendicitis and we found a perforated appendix.

DR. WAKEFIELD:

I agree with Dr. Crane's paper in regard to early diagnosis and early operation. I think about the only safe guide to go by is to plan to operate on all cases as soon as the diagnosis is made. A man perhaps will see a case of appendicitis as soon as it begins and apply ice externally, the symptoms abate markedly within six hours, perhaps the case can go along till the patient gets well, but even under those circumstances, I think there is some chance being taken. And I think the only rule one can lay down in these cases, is usually

to operate just as soon as the diagnosis is made. As to the Ochsner treatment, it seems to me that it is best applied after the operation and not before. It has been my experience that it is better to operate quickly—the operation does not take more than ten minutes—quickly open the abdomen and drain and then use the Ochsner treatment. As far as the material for the abdominal cavity, I certainly prefer cat gut or absorbent material for the stump, but I do believe we should be careful to cover all raw surfaces possible. I think if we do that we may cause less trouble from adhesions or perhaps prevent adhesions. Personally I try to be very careful to cover the stump with some peritoneum and also am careful to cover any raw surfaces that I may make in tying off the appendix. I think that is a duty we owe to our patients.

DR. W. C. PETERS:

I don't know anything about appendicitis, but Dr. Warren and I have just been making a comparison. All the doctors that we know that have had attacks of appendicitis are never operated upon until they have had half a dozen or more.

DR. SWASEY:

I am not a surgeon. My experience has convinced me that it is the best way, as soon as I have a case that I believe is appendicitis, to advise its removal. I do it invariably. A year ago I was called to a man thirty years old, lying on a couch, vomited the night before, had no temperature, he had no tenderness, he had no feeling of sickness. But I believed that under the abdominal wall I could feel the appendix distended, and advised an operation. He was not willing to accede to me. I left the house, felt uneasy about it, telephoned back and said I wanted to bring a surgeon with me to see him. He agreed with me. He advised an operation, took the man to the infirmary and operated at four o'clock, and the appendix was just about the size of my little finger, distended with pus. There was an area as black as my hat, just about as big as my finger, in fact all ready to break. I invariably advise operation as soon as I make a diagnosis of appendicitis.

DR. CRAGIN, of Waterville:

It strikes me if the medical men who believe thoroughly in Dr. Ostler, will take his latest work on modern medicine and read what he has to say about the medical treatment of appendicitis, it may do a great deal toward changing their mind as to the treatment. He says in effect that we cannot tell from the looks of the outside of the person what is going on inside. The appendix has proved that in more than one case, I think. In regard to a late operation for appendicitis, there are conditions in it—no longer appendicitis—we have then a general peritonitis to deal with and we must treat it accordingly. I think the judgment of the late cases, where you have to make a judgment on every case in the late stages as to whether you shall operate or not, you have to take the patient's condition into consideration as well as the character of the trouble. That is, the general clinical history, and make up your mind from that. Personally, in a case of appendicitis, I operate just as soon as I can. I believe thoroughly in that. And in the late cases, if there is any chance at all, if the patient is not moribund I usually give a chance with free drainage. I had one case about a year ago that I operated on, patient been sick a week, general peritonitis following perforated appendix, made incisions on both sides and on the flanks and drained thoroughly. I had a patient with fistula. He drained for nearly six months before he healed up. I believe in these late stages there is more to be done by surgery than there is by medicine.

DR. C. H. BURGESS of Bangor :

One question in the diagnosis of appendicitis that has been of great benefit to me during the past year, is distention of the surface veins in the region of the appendix. I always look for the distention of the veins over the region of the appendix and almost invariably I have found them to be distended in those cases which have been positively appendicitis.

DR. CRANE (closing discussion) :

In presenting this paper, I thought I would think of something that would stir up the most strife, and I concluded possibly this was the best one.

We will probably never agree in regard to the method of surgical treatment of appendicitis. On a recent trip to some of the larger clinics of the country, I noticed they were practically all performing this operation in different ways. In Philadelphia, Baltimore and Chicago, they were all going through the rectus or the outer border, while at the Mayo clinic the McBurney incision was being used. Also these surgeons were ligating the stump with a linen thread. The statistics as given by these men will compare more than favorably with any operators in the world, and the method followed by them is one which I am willing myself to follow. I will say, however, that they do investigate the appendix. The objection that I have to investigating the appendix, is, that often times in making our sutures we have more or less hemorrhage through our stitch holes and this I believe is more apt to cause adhesions than by a simple method of tying off the appendix and allowing the distal portion to slough. I have never yet seen an adhesion when a second abdominal operation was performed, due to a previous operation for appendicitis, where the simple ligation of the appendix had been performed without invagination. So far as linen thread being a foreign body is concerned, we all use it in intestinal anastomosis with uniformly good results. Why it should be any more a foreign body and be apt to cause trouble by ligation of the appendix is something that I fail to understand.

ADDRESS AT WASHINGTON COUNTY MEDICAL SOCIETY, MACHIAS, MAY 11, 1911.

BY PRES. C. E. JOHNSON, PRINCETON.

First allow me to extend to you my sincere thanks and appreciation of the honor you bestowed upon me in making me your presiding officer for the ensuing year.

I realize full well its responsibilities and the lack on my part of the ability to fulfill its requirements, but trust and know that you will bear with me in my short-coming, and endeavor to assist me in every-way possible in the discharge of my duties.

We, of the Medical profession, have duties to perform, which include those to the medical societies, and the public at large as well as to ourselves. And through a full discharge of our duties to our

medical societies, we better fit ourselves to some of the needs of the public.

Although I think that the meetings of the Washington County Medical Society have been fairly well attended, I regret that so many of us, either from pressure of business or otherwise, are prevented from attending. Our medical societies are far-reaching in their beneficial effects.

The fact of socially meeting together and exchanging views and ideas, reporting cases, which we have met in our practice, all tend to get us away from the narrow limits of self and broaden and brighten us for the active duties of practice.

Also are their influences felt largely in the business world and legislation.

Only a few years ago, the insurance companies, almost as a unit, cut the fee for medical examinations from \$5.00 to \$3.00. This society, together with many others, took immediate action and as a result of this nearly every life insurance company today is paying \$5.00 as the minimum fee for such examinations. During the legislative session of the past winter in this State, the same influence was felt by which we were enabled to get such laws enacted as seemed best for the public in general and ourselves, as well as the prevention of such other measures as seemed detrimental. I refer more particularly to Chap. No. 31 of Public Laws passed at the last legislature, relating to the registration of physicians and surgeons, which became a law almost identically as presented, with possibly two or three slight unimportant changes and is by far the best law we ever had upon the statute. Also the prevention of passage of the so-called Osteopath Bill, and an act making physicians' liability insurance illegal.

The defeat of these bills is of no less importance than the passage of the other.

I have only referred to a few of the many, many benefits to be derived from hearty co-operation in our medical societies. *Medical Research* is making rapid and long strides in these days. We trust and hope and have good reason to believe that before long the so-called incurable maladies will be under our control, and the "White Plague" will have lost its terrors.

Within a very few years, electricity has been harnessed for our use, and today is a powerful aid in diagnosis and treatment. And who is wise enough to predict its possibilities in the future?

Vaccine or Serum Therapy, although at the present time is in its infancy, is destined, I believe, to play a large part in the practice of medicine, even if it does not come quite up to the expectations of some of its most ardent advocates, who think it is going to revolutionize the practice of medicine.

A great deal is being done in regard to the causation, prevention and treatment of infantile paralysis or rather anterior polio-myelitis as it has apparently entirely outgrown its primitive name, as in these modern times it attacks people from all ages from the cradle to the grave.

Researches of this disease as to cause, manner of infection or contagion have necessarily been very slow. The germ producing it, though distinctive in character, and unlike any other, has been demonstrated. Notwithstanding the fact that it is so small that it cannot be discerned with the highest powered microscope and so minute that it readily passes through a porcelain filter. As to the causation of this disease, there seems to be a great variance of opinion. Nearly all, I think, agree that it is infectious, from some source, while the greater part claim that it is contagious in a more or less degree from coming in contact with those who are, or have been suffering from it. Some claiming that it is contagious to such an extent that patients having it should be isolated for two or three years. Some others apparently as good authority claim that it is rarely if ever communicated from one person to another.

Without doubt, we have been too lax in the past in recognizing the contagion of this disease. In the opinions cited, undoubtedly, the pendulum is swinging too far, in either direction.

But all these discussions are having a beneficial effect and will result eventually in our reaching a saner ground whereby the public will be properly protected without undue inconvenience and burdens upon the patient or family thus afflicted.

I will now touch briefly on a few suggestions relative to our duties to each other and the public.

The duties of the practice of medicine are hard, arduous and oftentimes try our nerves to the utmost, even under the most favorable circumstances. The acts and feelings of physicians toward each other should be of the most friendly character.

We ought at all times to endeavor to help and sustain each other.

We should never allow to creep in the least spirit of jealousy or rivalry, which often manifests itself in a little unjust criticism, or even silence at a moment when a word of commendation should be spoken, creates a wrong impression. A good kindly word spoken of your competitor will not only materially help him and lighten his burdens, but will rebound to our own advantage. The public is not slow to take cognizance of these facts: and if on the other hand we are endeavoring to build ourselves up at the detriment of another the community will be as quick to recognize that and stamp us with just condemnation, and lose confidence in the whole medical profession. They

rightfully feel that if we are dishonest with our fellow practitioner, we will be with them.

I think it would be well for each one of us on meeting in our several practices, as we invariably do, obscure, difficult cases, that we talk them over with other practitioners in our neighborhood, getting their several ideas, thereby not only improving our own knowledge, and gaining their confidence, but also giving our own patients the advantage of the opinions of more than one physician.

As to our duties to the public, first and foremost, of all is prophylaxis.

The prevention of disease, as far as possible, is the great duty we owe mankind.

Teaching them the observance of certain sanitary rules and regulations, and the regulations of their lives and modes of living in common every day life, in accordance with the experience and judgment of those who have made a study of prophylactic principles.

Also the immense benefit to be derived from pure air and pure water which are far better than quinine and calomel. Instill into their minds the fact that disease, in nearly all its forms, is caused by the violation of nature's laws and through the non-existing laws of retribution and compensation we or our posterity must pay the penalty. The time has passed when the practice of medicine was considered a hidden science. The people are beginning to inquire the whys and wherefores, from which we have no reason to shrink as our every professional act is or should be based upon sound physiological principles.

It is our duty to alleviate pain, save life if possible, if not, prolong it to the utmost, and in general to assist nature in placing our patient in such favorable conditions that life may be useful and happy. Last but not least, we should never overlook the fact of the "Spiritual Man," and fall into the fearful error of looking upon our patients as merely dilapidated machines laid by for repairs, thereby not only degrading ourselves and the profession, but insulting all humanity.

THE TREATMENT OF NERVOUS DISORDERS.

Valuable as are rest and dietetic regulation in the treatment of nervous disorders, it is generally recognized that effective tonics are always necessary. For instance, in chorea and the restorative stage of poliomyelitis, it is often surprising to note the remarkable impetus given to convalescence by the use of Gray's Glycerine Tonic Comp. Its administration promptly stimulates the appetite, aids digestion, and so improves the whole nutrition that recovery is substantially furthered and hastened. The same thing holds true in neurasthenia and the benefit that almost always follows the use of this remedy is invariably as gratifying to the practitioner as it is to the patient.

PHOTO THERAPY.

BY DR. S. J. BASSFORD, OF PORTLAND.

Light has long been recognized as a therapeutic agent. This is not strange when we consider the importance and the necessity of light, in sustaining all forms of life. As a life sustaining agency, it is no wonder that it should have been thought of and used as a therapeutic agent, for an agent so essential to organic life ought to have in it some quality which should aid in restoring to normal an organization vitiated and changed by disease.

Rays of light as they come to the earth from the sun are spoken of as *white* light. They come to us at the rate of one hundred and eighty-six miles per second, not in straight lines but by waves or undulations. The scientist has caught these rays of light and examined them. By use of the spectroscope, the very nature of the substances emitting this light is discovered. But that which more than all else interests us as medical men is the nature of this ray of light, and the uses we may make of it.

By use of a prism, white light may be separated into its component parts, the seven primary colors appearing always in the same relation to each other, with the red at one end and violet at the other, and the other colors in their relative positions between. These differences in color are caused by the difference in wave lengths, ranging from 450,000,000,000 per second in the red to 850,000,000,000 at the violet end of the spectrum.

Beyond the red and the violet are other frequencies, invisible, known as the infra red and ultra violet, with the increased frequency of wave lengths they become shorter and are of less penetrating power. The lower frequencies, the red, orange and yellow contain the heat and light radiations, while the higher frequencies, the blue, indigo and violet are actinic or produce chemical action but no heat.

We are able by use of proper lenses and screens to select whatever rays we desire to use and cut out the others. Observations relative to light from other sources than that from the sun, shown by spectrums analysis, give nearly the same results. The color appearing in the same relative positions with but little difference in the proportion of the various frequencies.

The natural source of radiant energy is the sun and this would furnish all we require, were conditions such that we could always find it at our disposal.

For our convenience we make use of the electric light. Various forms of lamps are used, the light from which will vary somewhat in the percentage of the different frequencies, some being richer in the

higher frequencies than others. The selection of the proper lamp for therapeutic work must be determined largely by the case to be treated.

Lamps giving a larger percentage of higher frequencies (blue, violet and ultra-violet) are superficial in their action, while those of lower frequencies are more penetrating in character.

For general use, the incandescent lamp is the most useful, and is used either as a singing lamp with hood, and proper screens for selection of certain rays, or by use in the bath cabinet used for general treatment.

PHYSIOLOGICAL EFFECT OF LIGHT.

The action of light energy on organs and tissues is a necessary one without which animal life is inhibited.

Experiments show that animals kept in the dark, eat less and weigh less than those kept in the light. That blood corpuscles, both red and white are influenced by light is well established, and it seems probable that the oxidizing and stimulating action on the blood cells are in a great degree responsible for the effect produced on general metabolism in the system. The action of light upon the skin may be such as to produce a slight hyperaemia or be so pronounced as to result in the permanent dark pigmentation of the skin, these results being obtained largely by the the actinic or chemical rays or higher frequencies.

The effect of light energy is to improve the tone of the pulse, respiration, to increase secretion and excretion and improve the whole process of metabolism.

The application of light is destructive to germ life, our most powerful germ destroying agent being sure light upon which we cannot place too high a value. One writer has recently said, "the chemical activities of light serve in hygiene, sanitation and also in disease. In one instance, to maintain health, in another to disinfect or destroy pathogenic germs and in the latter to check the inroads of disease by increasing not only the red blood supply but the white as well and the functional activity of the entire organism."

As a therapeutic agent, light is of great importance and value. A consideration of its character and effects upon the body will enable us to make use of it as a valuable aid in combating disease and giving tone to the system.

In these days, we are coming more and more to value sunlight as a remedial agent, not only in tuberculosis but in other vitiated and diseased conditions.

The germicidal, thermal and electrical effects bring about a more perfect metabolism. We make use of light in the treatment of dis-

eased conditions due to infection, because of its destructive action on germ life, as in lupus, cancer, etc. In local inflammatory conditions, as well as in eczema and kindred skin diseases, light has been successfully used and results have been obtained that were very satisfactory.

I desire to call attention particularly to one disease in which the use of the higher frequencies (the blue light) appears to be a specific remedy. I refer to Herpes Zoster. Knowledge of many cases of herpes has caused me to feel certain that the disease is attended by sequellæ that are more or less painful and continue for a long period of time after the objective symptoms have disappeared. In many cases, months are required to bring about a cure. There lingers behind, in a majority of these cases, a painful and annoying condition.

We recognize, in herpes, today, a neuritis, and while the acute stage of inflammation passes away in a few days, yet the results are many times very slow in disappearing, and, while not so painful as the acute stage, yet is of sufficient import to make one constantly aware of his condition and renders him less fitted for his work. It is really a condition of much seriousness, and any remedy which shall prevent this protracted period of suffering and inconvenience should be hailed with delight by every physician. During the past two years, I have used the blue light, in the treatment of herpes, using a one hundred or one hundred and fifty candle power electric lamp with hood, and blue glass screen. Daily treatments of twenty minutes each being sufficient to cause a rapid and perfect cure in a few days.

The first cases treated by me, after my attention was called to the blue light as a remedy, was a severe one, involving the cervico-brachial region. The pain was severe before and after the appearance of the eruption, and the eruption was very profuse. Treatment by blue light was commenced at once, the disease was arrested, the vesicles dried up, the pain was relieved and the patient made a rapid and perfect recovery.

All other acute cases treated in this manner have produced the same satisfactory results.

This treatment has not failed me in a single case in arresting the disease at once, and rapidly bringing about a cure. Have never seen a new vesicle form after the first application and have obtained a rapid cure with no after results such as has been the rule after severe attacks in previous cases. I look upon the treatment of Herpes Zoster by the use of blue light as a specific and I feel certain it will prove equally satisfactory in other hands as it has in the cases I have treated during two years past.

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Editorial Comment.

Support the State Journal and Library.

The Maine Medical Journal and the Maine Medical Library are owned and controlled by the State Association under the supervision of the Council. In 1910, \$700 was voted to run the Journal, while in 1911, \$1,100 was voted towards running the Journal and taking over the Maine Academy Library as the Maine Medical Library to be run for the benefit of the members. This year, the Journal received nearly \$300 from the Maine Academy treasury and will be able to complete its year's work without a deficit. Six pages of advertisements would enable the journal to continue its work without a handicap. Eight pages would give ample funds while each page above this could be turned back into the treasury or to a defense fund if established.

This can be readily done if each member will restrict his patronage to Journal advertisers. The concerns, dependent largely on the medical profession for their existence, ought to be willing to contribute a small amount annually in a manner that offers them a good return for their money. No reputable concern will sacrifice their business if they once realize that it depends on co-operation, which is a large factor in the business world.

Think this over, doctor, and if you desire to see the Journal, the library, etc., continue, do your part and we will do ours.

State Meeting.

Every effort is being made on the part of the officers and the various committees to make the 1912 meeting the best ever. The uncompleted programme appears on page 750 of this issue. In Sym-

posia, it covers two very important subjects, viz.—General Paralysis and Arterio-Sclerosis. These subjects are handled by men eminently fitted to give us the best. At the request of the cancer committee, Dr. Cragin of Waterville was invited to review some phase of this very important question. The paper on lead poisoning comes as a result of finding a number of cases and tracing them to the water supply. Obstetrics is always a vital question and will be handled by men who devote their entire time to this work. Both Dr. P. W. Davis of Portland for the general session, and Edwin B. Cragin of New York in the annual oration will cover all that is new and good.

The other papers will be excellent and should receive careful attention. The afternoon of the second day will probably be devoted to an open session on public health matters, providing the Committee can secure a good man. This session will be open to the public.

The questions submitted to the County Societies in the "Committee Report" will come up for final settlement. It is hoped that the 1912 session will not only supply a very substantial diet of the new things in medicine but will mark a beginning of better things for the profession as a whole.

Rational Therapeutics and the National Formulary.

The following from the Journal A. M. A. (March 2, 1912, p. 640) clearly distinguishes between the medical profession's propaganda for rational therapeutics as exemplified by the work of the Council on Pharmacy and Chemistry and the pharmaceutical "U. S. P. and N. F. Propaganda":

To further the intelligent and rational use of medicines, the Journal, with the assistance of the Council on Pharmacy and Chemistry and of the chemical laboratory, has exposed the false claims made in regard to the composition and the action of many proprietary medicines. This "propaganda for reform in proprietary medicines" has been supplemented by the efforts of pharmacists to promote the use of certain pharmacopeial and National Formulary preparations whose composition is similar to that claimed for some of the proprietaries which have been exposed. This "U. S. P. and N. F. propaganda" of the pharmacists falls short of our ideal in that it merely aims to substitute a readymade, usually complex and unscientific mixture of known composition, for a ready-made, equally complex and unscientific mixture of unknown composition. But in so far as it promotes the use of preparations of known composition in place of those of unknown, uncertain or fraudulent character, the medical profession is indebted to pharmacy for the aid which has been given. The medical profession

cannot, with good grace, criticize pharmacy for having chosen the path of least resistance when it attempted to wean physicians away from proprietary nostrums by encouraging the use of similar official preparations. There is danger, however, that the pharmacists' propaganda may mean only that the physician who previously used certain proprietaries uncritically will be led to use just as uncritically the official preparation from which the proprietary was derived. For instance, the physician who used Glycothymoline and expected the wonderful results claimed by the manufacturer, may use the alkaline antiseptic solution of the national formulary with equally absurd expectations. Or the physician who gave his patient Churchill's or Fellows' Syrup of Hypophosphites will prescribe the Compound Syrup of Hypophosphites, U. S. P., in the same haphazard and unscientific way. Let us hope therefore that those physicians who substitute official preparations for proprietary nostrums will do so with a full realization that they are still in their professional swaddling-clothes and that they should make a serious effort toward individual, rational prescription-writing.

The medical profession is indebted to pharmacy for its efforts to replace objectionable proprietaries by mixtures of known composition. But it is to be hoped that the medical profession before long will outgrow the shot-gun prescriptions of the Pharmacopoeia and the National Formulary.

Phenacetin Versus Acetphenetidin.

At one time the product generally known as phenacetin was patented and but one firm had the right to make and sell it. Some years ago, the firm's patent protection expired and the product is now available as acetphenetidin under which name it is recognized in the United States pharmacopoeia. But physicians either do not know that phenacetin and acetphenetidin are identical or else imagine that the first is superior in quality. As a result the former patentees sell the product under both titles, but continue to charge about five times as much for it when sold as phenacetin as when put out under the pharmacopoeial title. Now the chemical laboratory of the American Medical Association (Jour. A. M. A., March 16, 1912, p. 80) has made an exhaustive examination of the product on the market and finds all to be of equally good quality. Physicians may and should therefore prescribe the drug by its pharmacopoeial title "acetphenetidin."

When it causes suppuration, a foreign body is usually easily found, but if there be difficulty in locating it, it is better to be content with drainage for a few days rather than expose uninfected areas by a prolonged search. — *American Journal of Surgery.*

Book Reviews.

Microscopy, Bacteriology and Human Parasitology.

By P. E. Archinard, A. M., M. D. Pub. by Lea and Febiger.

A concise presentation of such elementary bacteriologic facts and methods as could be utilized by the general practitioner.

E. W. G.

Physiology.

By A. E. Guenther, Ph. D., and Theodore C. Guenther, M. D.
Published by Lea and Febiger.

As a brief exposition of Physiology this work answers its purpose admirably.

E. W. G.

Review of International Clinics, Vol. IV, Twenty-first Series.

Volume four, twenty-first series of International Clinics contains a rich fund of good reading and valuable information.

Under treatment, Dr. James Burnet has an excellent article on enuresis. He lays special stress on discovering the cause and treating accordingly, giving up the old custom of treating all cases of enuresis with belladonna.

Prophylactic Treatment of Hypertrophy of the Prostate Gland, with Remarks on an Efficient Method of Treatment of Acute Gonorrhea is the subject of a paper by Drs. Ballenger and Elder. They advocate the use of mixed vaccine to overcome the low grade infection from staphylococci and *cola vacilli*. In acute gonorrhea, they inject fifteen to twenty minims of a five per cent argyrol solution into the urethra and seal it in with collodion, leaving from five to eight hours, repeating for four days. They claim excellent results from this method in early cases.

Dr. Dudley reports excellent results from Agaragar in those cases of constipation, due to a small amount of residue and in spastic conditions. In diarrheas of long standing, those associated with spastic constipation and in mucus and membranous colitis, he gives four heaping teaspoonfuls of ground or chopped agar with the food.

Kerosene in dysentery has given excellent results in the hands of Dr. J. C. Johnson. He reports a number of cases so treated which resulted readily in diminution of pain, number of stools and amount of blood in stools. His treatment consists of giving an enema of one pint of normal salt solution, when this has been expelled, he gives an enema of one grain Thymol, four oz. olive oil, and four oz. kerosene, repeating in twelve hours, gradually increasing the interval until cured.

Dr. Trimble has a valuable paper on Modern Treatment of Syphilis. He discusses the relative values of arsenobenzol and mercury and advises a joint treatment, using first the six hundred and six, then if the passerian is negative after thirty days, begin the mercury.

Under diagnosis, Dr. G. W. Norris reviews the many different blood pressure instruments and comments on their usefulness in diagnosis.

The Benzidine Test for Occult Blood in the Stool is simplified by J. Russell Verbrycke. He points out the value of the test in diagnosis of ulcer and cancer and its prognostic value in the treatment of the former.

Rat-bite disease, with report of a new case, is gone into extensively by Dr. Frederick Proescher.

Under medicine in an article, Empiricism and Modern Medicines, we are warned against too readily grasping the new remedies and condemning the old empirical treatment that in the past has shown such good results.

Of interest in these days of vaccine therapy is an article by Dr. V. C. Vaughan, Jr. He explains the evil results sometimes seen following the injection of animal sera and the beneficial results following entrance of bacterial cells into the body.

Of great value to the general practitioner who gives much ether is the article by Dr. P. J. Flagg. He gives a list of articles an anesthetist should have in every case of anesthesia, and has many valuable suggestions.

Dr. J. A. MacMillan advises local anaesthesia in selected cases of hernia. He claims for this method a more rapid healing with absence of swelling and a lower mortality.

In Intestinal Surgery Ap., Morgan Vance, M. D. advocates the end to end anastomosis by means of suture, discarding all the mechanical contrivances advocated for this operation.

Under Otology, Dr. Harold Hays goes extensively into the treatment of Catarrhal Deafness and Tinnitus. He says eighty per cent of deafness is caused by nose and throat complications which obstruct the eustachian tubes. His treatment is removal of complicating cause, then dilation of the tube.

Dr. Maria M. Vinton, under Pediatrics writes an interesting article on Mentally Deficient Children, a subject little thought of outside the larger cities. She advises separate schools for these children where they are taught on an elaborated kindergarten scheme. She cites results already obtained in the larger cities.

In the field of Ophthalmology, Dr. J. M. Ray gives as the three causes of strabismus in nearly every case: (a) an hereditary ten-

dency, (b) far sightedness, (c) defective vision in the deviating eye. He condemns the old practice of dividing the internal rectus and advises advancement of the external rectus muscle.

To the young man about to launch into the practice of medicine, the paper of Dr. T. F. Reilly on the Successful Practice of Medicine is of unestimable worth. Dr. Reilly gives advice to the young doctor on his relations to the public, his brother physicians, on book-keeping, collection of fees, etc., that is worth dollars and cents to any man who will spend the time to read the same. His paper is full of little suggestions that are of great moment to the young doctor and which he will not find elsewhere.

Other papers of interest are Checking Waste in Dispensary Work, Senile Degenerations, Senile Mentality, Legal Facts in Surgical Cases and Edward Jenner the Man.

M. A. W.

Program of the Portland Session.

(INCOMPLETE)

WEDNESDAY, JUNE 12, 1912.

MORNING SESSION, 10 A. M.

Arterio-sclerosis,

T. J. Burrage, Portland
S. J. Beach, Augusta

AFTERNOON SESSION, 2 P. M.

President's Address.

General Paralysis,

H. W. Miller, Augusta
F. Hills, Bangor
Herbert Thompson

Annual Banquet, 7 P. M.

Annual Oration, 8 P. M.

President's Reception, 9 P. M.

THURSDAY, JUNE 13, 1912.

MORNING SESSION.

Lead Poisoning in the Water Supply,
Obstetrics,
Cancer,

Adelbert Stewart, South Paris
P. W. Davis, Portland
Donald Cragin, Waterville
Dr. Flint, Dover

AFTERNOON SESSION.

Election of Officers.

Public Meeting.

Address.

Clam Bake

Abstracts of Current Literature.

UNDER THE CHARGE OF THE MEDICAL REVIEW CLUB
OF PORTLAND.

(The American Journal of the Medical Sciences, Sept., 1911.)

A Critical Review of the Surgical Treatment of Nephritis.

By Morris Booth Miller, M. D., of Philadelphia.

The writer traces the history of decapsulation of the kidney for chronic Bright's disease, from the initial observation in 1896, by Reginald Harrison of London, that incision or puncture of a congested kidney often relieved albuminuria and other renal symptoms, down to the present time.

He wisely draws a distinction between local albuminuria and systematic albuminuria.

In the first group occur renal wounds and infections, stone and gravel and malformations and displacements which interfere with the normal renal circulation.

In the second group are found (1) organic and inorganic poisons, acting on the kidneys through the blood; (2) over-charging of the blood with proteids; (3) micro-organisms, acting on the living cells or on the proteids in the blood; (4) putrefactive fermentation within the alimentary canal with absorption of poisonous products.

Albuminuria so produced is not *per se* Bright's disease, but Bright's disease may follow if the irritation of the renal structure is continued long enough.

He denies that Bright's disease is in any sense an inflammatory process. On the contrary, he considers both the parenchymatous and interstitial forms, degenerative processes which are irreparable from a pathological standpoint.

But from a physiological standpoint, a relative cure is possible if remission of the symptoms can be secured, since the renal function possesses compensatory powers second only to those of the heart.

He then discusses the surgical measures whereby the remission of the symptoms of Bright's disease can be favored, such as the use of cups, both dry and wet, over the loins, and general resection. As to decapsulation of the kidneys, he has this to say: "I believe that cutting down upon the kidneys accomplishes all the purposes of cupping and blood-letting, and does it better because it tends to relieve the disturbance at its focal point."

The most favorable cases for decapsulation are those where there is arterial hypertension and oldema, and particularly in acute nephritis following the examination. The operation is worth while in chronic parenchymatous nephritis but is rarely warranted in chronic interstitial nephritis. His conclusions are: (1) that operations may be hopefully done in acute nephritis; (2) that young patients are the best subjects; (3) that there is sound reason for operating for anuria or uremia, occurring in chronic nephritis; (4) that operation may be performed as a last resort in any form of nephritis.

He gives the immediate mortality at thirty per cent, and the subsequent mortality at forty-four per cent. The operation should be done under spinal anaesthesia.

The kidney having been exposed, the capsule is split vertically and pushed in folds well in toward the pelvis. Both kidneys should be so treated. A drainage tube is inserted and the wounds closed.

A new capsule forms in time. In the successful cases, the urine increases in quantity and the albumin diminishes within forty-eight hours. The physiological cure should be complete within thirty-five days.

C. R. BURR.

(The Boston Medical and Surgical Journal, Vol. CLXVI, No. 8, Feb. 22, 1912.)

The End Results of Surgery in Neurasthenics and on Neurasthenia.

By Edward Reynolds, M. D.

The writer considers neurasthenia a condition which is a result of poor inheritance, or poor environment, with an abnormally low capacity for resisting the depressing influences of civilization. If such an individual be subjected to an undue amount of work, he or she will develop some part or whole of the symptom—complex which we know as neurasthenia. In many cases, the nervous break-down has been the result of the added load due to chronic pain or other suffering, particularly lesions of the pelvic organs in the female.

He says that when the gynecologist is satisfied that an attack of neurasthenia is the result of some definite local lesion capable of producing that symptomatology and which is susceptible to a cure by a conservative operation, the surgeon is warranted in believing that the operation will lessen the overload, and be followed by a marked improvement in the general health.

The operation does not cure the neurasthenia but does give immediate relief from some of the distressing symptoms. The rest and hygienic treatment is as essential after operation as without it. In

spite of the limitations, or to the selection of cases, there are a large number of neurasthenics, especially in gynecological practice, where the degree of relief is more than sufficient to justify operative measures.

A. H. WEEKS.

(Medical Record, Dec. 30, 1911.)

Scrubbing Ulcers.

By Eric Carl Beck, of New York (Attending Surgeon St. Mark's Hospital).

This procedure has reference principally to the treatment of varicose ulcers, but there is no reason why it is not applicable to other forms.

The author gives in detail the pathological conditions present in ulcers, which are in brief a tissue necrosis, a molecular death of the superficial tissues which liquefy and disappear, usually without a slough. Nature in the process of repair goes through three stages, (a) the removal of the sloughs; (b) the covering of the surface with a cellulo-plastic exudation; (c) the vascularization of this newly formed material with its conversion into granulation tissue.

In the larger surgical dispensary clinics, forty per cent of cases are for old sluggish chronic varicose ulcers, which resist all forms of ointments and washes.

The rationale of the scrubbing treatment is to aid nature in throwing off the minute and often invisible areas of tissue necrosis,—as in osteomyelitis we remove dead bone to facilitate healing.

The procedure consists in thoroughly removing with soap and water and a scrubbing brush all the diseased spongy tissue until the base of the ulcer is smooth and its edges stand out clearly, red and hard. The resulting hyperaemia often shows a beginning line of granulations in twenty-four hours. Surface is painted with iodine and a wet dressing applied. Results have been excellent, the only difficulty being in persuading the patients to consent to an anesthetic for what they consider a trivial affair in the beginning.

W. BEAN MOULTON.

(Annals of Surgery, December, 1911.)

The Blood Pressure Index of Eclampsia.

By Harold C. Bailey, M. D., New York City, Instructor in Obstetrics in Cornell University, Adjunct Assistant Obstetrician to Bellevue Hospital.

The greatest danger confronting the pregnant woman is eclampsia. The urinary changes of the pre-eclamptic state are very unreliable.

Albumin is usually present but may at times be absent or present in a very small amount. The disease is probably auto-toxic, due to the degeneration of the liver cells. The changes in the kidneys are probably secondary as proven by the fact that in seventy-five per cent of the cases, there are no abnormal urinary signs a short period following delivery.

The urea percentage, as estimated by the usual tests, he regards as of no value. When the total nitrogen in a twenty-four hours' quantity can be determined by laboratory methods, distinct value may be assured, but the cost of this is not acceptable even to the very wealthy.

Attention is called to the value of blood pressure tests. In eleven hundred and thirty-six readings in one hundred and forty-five women, made by Edgar during the last four or five weeks of pregnancy, the average blood pressure was found to be 118mm. A variation of 30mm. is frequent but there is a limit above which no patient goes in health. This is placed at 160mm.

With the onset of labor pressure is increased from 140mm. to 145 mm. between the pains. In beginning toxæmia, the vomiting centre is usually affected and the blood pressure is low. In the fulminating type of the toxæmia pressure is low. In the developed toxæmia of later months, there is usually a decided increase in blood pressure. This represents the natural body resistance.

Increased blood pressure can usually be classified under three heads: 1st, in acute and chronic nephritis. 2nd, in arterio-sclerosis. 3rd, in eclampsia. As marked arterio-sclerosis is unusual at this period of life, the cause would usually be one of the other two.

Any treatment must take into consideration that it is not the increased blood pressure in itself which is to be combated but the toxæmia. Frequently people with arterio-sclerosis will stand a persistently high index; therefore he deplores the use of *veratrum viride* as tending to depress the body resistance. The nitrites might be indicated if the pressure remained persistently above 200 mm.

Improvement is usually marked after delivery. Therefore with a rising pressure index in spite of all attempts to control the toxæmia by rational methods, not by the use of the so-called vaso-dilators which only obscures the condition, pregnancy should be terminated.

Conclusions:—Average blood pressure in later months, 118mm. Variations of 30mm. not significant. Pressure above 150mm. should be thoroughly investigated. In eclampsia, blood pressure is usually in the neighborhood of 200mm. Treatment should be directed, removing the toxins not directly toward the relief of high tension. Try weekly blood pressure examinations in addition to urinary tests, the best safeguard against sudden seizures.

H. E. MILLIKEN.

(American Journal of Dermatology and Genito-Urinary Diseases, Nov., 1911.)

Hypertrichosis and Its Treatment.

By A. C. Geyser, M. D., Professor of Physical Therapeutics, Fordham University, New York.

The writer, after pointing out the temporary value only of strong alkali pastes in the treatment of superfluous hair, takes up in detail the use of the electric needle in this condition. This method, he says, is ordinarily very successful but has several drawbacks. Some patients are hypersensitive to electrolytic action and cannot stand the pain of the needle. In other patients, there is a tendency to keloid and scar tissue. At best, the treatment is tedious and during its course the face may have a moth eaten appearance. So, he says, however good and efficient the method, it must be relegated to the past and give place to the Roentgen Ray method which possesses all the virtues and none of the vices of the other methods. He says by the use of the Cornell tube, all the hairs can be permanently removed without injury to the skin. He prefers the coil because the interruptions can be made so slow that heating cannot take place. He also prefers a coil possessing a variable induction, and says the best interrupter is the Wappler mechanical. The tube should not be more than fifteen minutes in contact with any one area. The treatment should take place twice weekly. While the new area is under treatment, the old or clean spot must be treated at least once per week to prevent a return.

PHILIP P. THOMPSON.

(American Journal of Dermatology and Genito-Urinary Diseases, Nov., 1911.)

Functional Kidney Diagnosis.

By L. E. Schmidt, M. D., and H. L. Kretschmer, M. D., Chicago.

The authors state that in operative work on the higher urinary tracts, there has long been needed an accurate means of estimating the functional capacity of each kidney. They state that they have used, in a large number of cases, the phenolsulphonephthalein test of Geraghty and Rowntree, and have found it easy to perform and the most adaptable, as well as the most accurate of the functional tests in use at the present time.

They describe the technic of the test as used by them. Fifteen to thirty minutes before administering the drug, the patient is asked to drink 400 to 500 cc. of water to insure good urinary secretion. Then a 1 cc. solution, containing six mgs. of phenolsulphonephthalein is injected subcutaneously, intramuscularly or intravenously. The urine is collected or passed into a twenty-five per cent solution of so-

dium hydrate, the time noted when the first pink color appears in this solution and also the length of time and per cent of drug passed are determined. Of course in suspected kidney lesions, the ureters must be previously catheterized and special catheters are run into test tubes of the solution. In lesions of the bladder or prostate, the renal function can be tested from the mixed urine either passed or collected by a bladder catheter. In normal kidneys, if the drug is given subcutaneously or intramuscularly, they find it should begin to be excreted in about ten minutes and if given intravenously in two or three minutes. Several of their cases are cited which came to operation, showing that the conclusions drawn from the test were proven to be accurate.

In concluding, they make a very interesting statement, i. e., "The carrying out of this test repeatedly on one and the same patient at intervals of three or four days has shown an increase in the rapidity of elimination as well as an increase in the percentage of the drug excreted; and accompanying this, a distinct improvement of the patient clinically during the period of time that preparatory treatment was given."

PHILIP P. THOMPSON.

(*Journal of Ophthalmology, Otology and Laryngology*, Vol. xvii, Sept., 1911.)

Symposium on Ethmoiditis.

By Irving Townsend, M. D., New York City, and A. Worrall Palmer, M. D., New York City.

After reviewing the boundaries of the Ethmoidal Cells and emphasizing the fact that normally, the cells do not intercommunicate but have their separate drainage system, the histological changes from the simple hyperemic to the chronic purulent forms and the reasons therefor are carefully reviewed. The question of intercommunication, between Ethmoidal Labrynth and Orbit or Cranial Cavity, through medium of lymphatics and blood vessels, is discussed at length. Both papers emphasize the importance of a more careful consideration of the so-called colds in the head, more particularly when recurrent. The Ethmoidal Cells are so placed that the slightest hyperemic will interfere with proper drainage of the cells. Local treatment will accomplish the most but if manifest deformities exist, the treatment is surgical.

The following conclusions are from Uffenorde:

1. Process is progressive and extends from surface toward bone.
2. It is not always possible to differentiate histologically between polypoid swelling and polyp formation, as both may involve the deeper

structures. Usually polyp development is the more chronic, and is more often associated with bone disease.

3. Neither the polypoid swelling nor the polyp are factors in bone involvement. This is simply a result of the chronic inflammation.

4. The changes in bone seem to take place more readily in the delicate wall of the ethmoid labyrinth than in the middle turbinal.

5. The inflammation may extend from one part of the membrane to another through the bone itself, as well as through the opening in the same. It generally begins on the outer surface of the medial ethmoid wall.

FRANK Y. GILBERT.

(The American Journal of Orthopedic Surgery, August, 1911.)

Joint Tuberculosis in Children.

By Leonard W. Ely, M. D., Denver, Colorado.

The author in this article brings attention to the fact that the joints of children should not be treated always by the same principles as those of adults.

He says that tuberculosis always begins either in the red marrow of bones or in the synovial membrane of joints; that in very young children and in adults there is a less relative proportion of red marrow, so that resections of adult joints by removing the red marrow are more likely to bring a cure than in children.

He deplores radical operations upon the joints of children; he points out the use of rest in the treatment of such cases; he advises against the use of any particular form of dressing, brace, or appliance, and claims that each individual case must receive that mode of treatment best applicable to it. He brings out three main points to be observed in conservative treatment:

1. Deprivation of function.
2. Avoidance of secondary infection.
3. Fresh air and good food.

The paper is a rather common sense dissertation of the subject, does not go into detail, and brings to light nothing new.

H. A. PINGREE.

A subcuticular whitlow is often the superficial expression of a deep infection. After removing the raised epidermis carefully, inspect the tissue beneath for a small opening. If this is neglected, the process may speedily advance to the tendon sheath. — *American Journal of Surgery*.

(Surgery, Gynecology and Obstetrics, February, 1912.)

Cancer of the Stomach, Its Surgical Cure.

By William J. Mayo, Rochester, Minn.

In all the history of disease there is no authenticated case in which a cancer of the stomach has been cured by medical means. Yet for some reasons that are apparent, and others which are not apparent, cancer of the stomach is treated by the physician, admitted to the medical wards of our hospitals, and only rarely is a surgical consultation considered necessary.

Such is the introduction to an article written by Dr. Mayo, then follows a clearly and concisely worded article on the subject from the standpoint of the experience of this Master of Surgery, placing cancer of the stomach as wholly within the province of the surgeon as strangulated hernia or cancer of the breast.

When brought face to face with cancer of the stomach as an established fact, the apathy of the physician is only equalled by that of the patient and to diagnose cancer of the stomach is enough to satisfy the patient, family, and friends and is received with an Oriental-like resignation as being the fate which none can escape. What are the facts? Cancer of the stomach gives operative results that are as good as operation for cancer in other parts of the body.

Billroth, the pioneer along these lines, pointed to a mortality of 64% and was subjected to great criticism on account of his pylorectomies and partial gastrectomies from conservative men whose mortality was 100%.

Mayo estimates the chances of a man with cancer of the stomach in his clinic for the last 100 cases operated on, as follows:

Cancer of the stomach sufficiently localized to warrant its removal has better than a 90% chance to recover from the operation. Better than a 36% chance for a three-year cure. At least a 25% chance for a five-year cure.

Gastro jejunostomy for the relief of pyloric obstruction from advanced cancer, has proved a pitiful palliation and submits his patient to the resection of the disease even when the chance for cure is hopeless as metastasis will frequently give a painless and much less to be dreaded termination. Giving an average prolongation of life of 12 months as against about five by the gastro jejunostomy.

The positive diagnosis of cancer of the stomach, when made by the laboratory expert, who marshals all the characteristic symptoms and details of the progress of the disease over a period of weeks, makes interesting reading for the undertaker, but is a gruesome history to pass on to the operating surgeon.

Looks upon laboratory methods as aids only in the diagnosis of cancer, and pins his faith to the history and physical examination.

Gastric acidity of little value, when taken alone, free Hydrochloric acid usually reduced in cancer of the stomach, but not always a cancer developing on an ulcer may give increased acidity and free Hydrochloric. Chronic pancreatitis and pernicious anaemia may give a low acidity. Benign obstructions are often marked by a low acidity, with absence of free Hydrochloric and lactic acid and the presence of the bacillus of Oppler-Boas.

Occult blood, much heralded as a sign of great magnitude, may come from passing the stomach tube or brushing the teeth. The X-ray is also of small value in the early diagnosis. The Gastroscope and the gastroduodenoscopy not as yet of definite use. Sero therapy is in an experimental stage.

On what can we count then, as a basis for early diagnosis?

Divides the stomach into two parts by dropping a line from the cardia that to the left poorly supplied with lymphatics and cancer much less frequent. Pyloric end and lesser curvature abundantly supplied with lymphatics much more frequent and can be recognized.

Cancer of the fundus can seldom be recognized in time for extirpation. 80% of cancer is of the pyloric end and can be palpated.

A movable tumor at the pylorus, with remnants of food in the stomach as determined by the stomach tube, eight to ten hours after eating, he regards as the two most important symptoms in the diagnosis and demand an incision.

It does not take an expert to palpate a tumor of the pylorus, nor a laboratory specialist to find remnants of food in the stomach.

At present, fifty per cent of the cases should be diagnosed sufficiently early to warrant operation.

Finally he goes into the question, as to what includes inoperability, and finds under six heads the principal symptoms of advanced cases with metastasis and cachexia and closes with the following words: Cancer of the stomach is the most frequent and hopeless form of cancer in the human body, and early operation affords the victim his only chance of cure.

The subject matter of this paper has been so well winnowed by its author, that an attempt to abstract is a felony.

H. E. MILLIKEN.

A New Typhoid Fever Test. (Preliminary Report.)

By Francis A. Prendergast, of Brooklyn, N. Y.

This test, which the author considers easy and sure, consists in injecting with a hyperdermic needle a suspension of dead typhoid

bacilli of strength of less than 5,000,000 per c. c. This strength is obtained by taking one drop of the regular market typhoid vaccine (1-1000 million) and adding 20 drops sterile salt solution.

The mixture is injected intradermally, being careful to raise as superficial a bleb as possible.

The test depends on the fact that in a *non*-typhoid patient, a well marked area of redness appears in 24 hours, around the point of injection; whereas the *typhoid* patient shows absolutely no reaction. The reaction as a rule, begins to appear in 12 hours, reaches its maximum in 24 hours, and has disappeared in 48 hours. Any redness after 48 hours is considered as an infection and is not taken as a reaction. There is no constitutional reaction (malaise, fever, chill, etc.) and no element of danger.

He reports results in 27 cases in the Kings County Hospital. In the 12 clinically acute typhoid fever cases, the Widal was present in 11, and this new test (no reaction) in all. In 15 controls, (non-typhoids), the results were equally uniform.

Advantages of the test. No danger to patient. No danger from live culture (as in the Widal test). No constitutional or local after-effect.

No microscope, no blood of patient required, Appears early — one case, in three days before the Widal typhoid fever test.

How early future cases and a greater number will show. Simple and easy to apply. No wait for laboratory report. Seems to establish the diagnosis of typhoid fever, after a lapse of years. (3 and 6 years in two of the controls.)

W. BEAN MOULTON.

(Medical Record, Dec. 2, 1911.)

The Treatment of Tuberculosis and Other Diseases of Vegetable Parasitic Origin by Deep Muscular Injections of Mercuric Succinimide.

By Barton Lisle Wright, M. D., Surgeon U. S. Navy.

This a very suggestive article and the truth or falsity of the conclusions advanced are quite within the province of any medical practitioner to determine.

The author begins with Ehrlick's theorem that every specific micro organism has a special chemical affinity which if injected into the host will cure the specific disease.

Wright thinks he has found the special chemical affinity of the tubercle bacillus in the succinimide of mercury, and since the bacillus is a vegetable organism, he reasons that other low grade vegetable organisms will similarly combine with succinimide of mercury.

Thirty cases are reported in which the treatment was carried out, to wit: tuberculosis, three cases; broncho pneumonia, one case; typhoid fever, three cases; catarrhus epidemicus, five cases; acute follicular tonsilitis, ten cases; cystitis, one case; chronic otitis media, one case; cellulitis, one case; furunculosis, four cases; chancroid, one case.

The first case of tuberculosis was admitted to the sick list, November 4, 1910, with both lungs involved, temperature, 104.5 degrees Fahrenheit. On November 11, the left pleural cavity was found to have a fluid exudate which was aspirated November 12. On the 15th of November, an injection of mercuric succinimide was given. On December 3, tubercle bacilli were found in the sputum. The case history is given in detail, by which it appears that the symptoms gradually subsided till December 26th, when he was discharged to duty, apparently well. Sixteen injections in all, having been given.

On May 21 following, he weighed 172 pounds, which was four pounds more than he had ever weighed before. The same day he fell ill with appendicitis, was operated on and the peritoneum found to be studded with tubercles. Death followed six days later. At the necropsy, both lungs showed healed tubercles, while the apex of the right lung had a tuberculous cavity of new formation. Below the diaphragm there was a general infection with miliary tuberculosis, liver, spleen, kidneys, etc. This case was treated in the early days of the theory and Wright thinks the patient did not receive enough of the drug.

The second case of tuberculosis had a happier ending. The patient was admitted May 12, 1911, with an infiltration of the right upper lung. On May 19th, the sputum contained tubercle bacilli. He was given four injections of the succinimide of mercury at varying intervals and restored to duty, apparently well, on June 14, 1911. Four months later, he still had no symptoms of disease.

The third case of tuberculosis also improved on the mercurial treatment, but passed out of observation before a cure was effected.

The case of broncho-pneumonia was cured by one injection of the succinimide of mercury on the fourth day, the temperature of one hundred and three degrees, dropping to normal twelve hours later. The diagnosis rested on the clinical symptoms and the presence in the rusty sputum of numerous pneumococci and some staphylococci.

The typhoid fever cases were cured with three or four injections in from seven to fourteen days. In each case the *bacillus typhosus* was found in the urine. The other cases reported were all cured or much improved in short order, except the case of chancroid which received no benefit from the treatment. The case of cellulitis of the

hand showed a swollen, red, hot, painful and boggy condition which disappeared within twenty-four hours after the injection. No other treatment, except a protective dressing and sling.

As to dosage, Wright advises an initial dose of one and two-fifths grains (0.091 gram.) in cases of tuberculosis, in an adult man. Four days later, he gives four-fifths grain; four days later, two-fifths grain; four days later, one-fifth grain, and four days later, three-tenths grain.

In typhoid fever, if this case is seen early, say in the first week, he advises an initial dose of one grain and in twenty-four hours a second dose of four-fifths grain. If on the contrary the case is first seen in the second week or later, not over $\frac{5}{5}$ grain (0.065 grain) should be given at one time for fear of producing violent peristalsis and perforation. His chart records for catarrhus epidemicus, tonsillitis and otitis media chronica, show doses of $\frac{8}{5}$ grain, $\frac{6}{5}$ grain, $\frac{4}{5}$ grain, $\frac{1}{2}$ grain.* He bases his present theory of dosage upon Ehrlich's dictum that a single large initial dose of the chemical affinity would destroy the infecting organisms while small, frequently repeated doses immunizes them against the affinity.

Finally, while admitting that his treatment may cause mercurialism, he says that out of thirty thousand deep muscular injections he has not yet seen a case of abscess or necrosis caused thereby. The treatment is contra indicated in organic lesions of the kidneys of non-bacterial origin and asthma.

*The solution of mercuric succinimide should be made so that 0.260 c. c. (4 minims of sterile distilled water equals 0.013 gram ($\frac{1}{8}$ grain) of mercuric succinimide.

CHAUNCEY R. BURR.

(Journal of the American Medical Association, Nov. 18, 1911.)

Visceral Syphilis.

Frank Billings, M. D., Chicago.

Visceral syphilis, though it may occur in the secondary period of the disease, is most common clinically, in the tertiary stage. It attacks most frequently the liver, heart, blood vessels, then the lungs, spleen, gastro-enseric tract and kidneys. The symptoms of syphilis of the lung resemble that of tuberculosis or bronchiectasis, though taterch bacilli are absent. The liver is the most common seat of visceral syphilis, producing diffuse hepatitis or germnata. The cases sometimes simulate gall stones or cholecystitis. The diffuse type usually produces atrophic cirrhosis. Syphilitic nephritis is rare and often aggravated by mercury and potassium iodide. The urine is that of chronic interstitial or parenchymatous nephritis. The syphilitic toxin acts with great severity on the heart and blood vessels, producing various

types of arteritis and endarteritis. A large percentage of aneurisms is due to syphilitic arteritis and the *spercheata pallida*, having been found in late lesions of the aorta, explains the progressive nature of the condition. The diagnosis of visceral syphilis may be very difficult, though the liver, heart and blood vessels will often give sufficient evidence for diagnostic purposes. Symptoms, as septic temperature, associated with chills and sweats, interrupted by periods of latency, combined with a careful physical examination should point us in the right direction. The disease is most often confused with tuberculosis and malaria. The progress in visceral syphilis with adequate treatment is very fair, depending on the location of the disease. The most satisfactory treatment consists in the use of deep intramuscular injection of mercury given every day or two for twenty-five injections and repeated several times at intervals of three or four months. The iodides help dissolve and cast off the morbid syphilitic material but have no action against the spirochaetes. Salvassau cannot be used, owing to the fact that it aggravates the condition, especially when the disease affects the heart, blood vessels and kidneys.

T. J. BURRAGE.

(The Alienist and Neurologist, Vol. xxxii, No. 4, Nov., 1911.)

The Career of a Moral Imbecile.

By Martin W. Barr, Chief Physician, Pennsylvania Training School for Feeble-Minded Children.

The introductory remarks are as follows: "There seems to be no subject in the realms of science, sociologic or medical, so little understood and so often misunderstood as that of moral imbecility in its many aspects."

The case cited by Dr. Barr, is that of a boy age 14; height 5 feet 3½ inches; weight 117½ pounds; head well formed; palate normal; teeth irregular, few decayed, heart action and reflexes good; sight and hearing normal; slight hesitancy in speech. Speaks readily, English, German and also "Romany." Memory good; powers of attention and imitation fair; can write and read intelligently. Nervous and active, is disobedient, untruthful, untrustworthy, profane and vulgar. Parentage fair.

From the quarterly reports, the progress of this boy is shown for a period of some four years, when he eloped from the institution, while his later life was followed through correspondence and newspaper reports showing him first, as a tramp, and next as a gipsy. Some eight years later, at the age of 28, he came to the institution, a neatly dressed and well groomed, nice looking fellow, draw-

ing \$35 per week, travelling on vaudeville circuits as sword swallower, glass eater and snake charmer, having served as an assistant. He was known as "Yello the famous sword swallower of the world."

Within a few years, he submitted to fourteen operations on the stomach from which were abstracted tacks, nails, marbles, glass, etc., besides four rectal operations.

In 1909, he barely escaped death from a snake bite while performing in New York.

In 1910, there was another report of an accident during which time he was found to be suffering from an advanced pulmonary tuberculosis, while in the latter part of September, he was operated on for the sixteenth time for the removal of foreign bodies from the stomach from which he recovered and still pursues his peculiar vocation.

Dr. Barr concludes as following: "Herein is an example—not wholly typical—of exaggerated egotism so characteristic of the imbecile, which in varied directions excites and stimulates the mental and moral sensibilities, dominating with a power as entire as that of alcoholism.

Native wit, talent, perseverance, powers of endurance and rapid recuperation, all that might be priceless to the normal individual, be he soldier, statesman or student, are for him, as are all gifts, physical, mental and moral—simply enslaved by the emotions, and he can accomplish nothing except at their bidding. An intelligence keen enough to recognize his own deficiency and the world's ignorance of it is led by the same powerful ego to devise means to further deceive, finding absolute intoxication in achieving each deception.

Could mankind be brought to understand such an anomaly the necessity for its permanent sequestration—not incarceration—would be manifest. As it is, there is for such absolutely no protection. A derelict upon the ocean of life he drifts, a menace alike both to society and to himself. Again for his brothers, as for him. Alas poor Yello. In a perpetual childhood, uncared for and unprotected, he grows more reckless and life for him begins only when at last he can say *ad sum*."

FRANK Y. GILBERT.

Vesical calculus is very common among the Chinese, appendicitis very rare. — *American Journal of Surgery*.

Creeping infants may gather wood splinters or needles in their hands or knees, and abscesses in those localities should suggest such an etiology. — *American Journal of Surgery*.

County News.

CUMBERLAND. AN INVITATION.

The Cumberland County Medical Society deems itself very fortunate in having secured for its April meeting Dr. Edward P. Davis of Philadelphia, Professor of Obstetrics in Jefferson Medical College.

Dr. Davis will take for his subject "Modern Obstetrics," a subject which we think will be of much interest to the majority of the practitioners in the State. The meeting will be held at the Congress Square Hotel at eight o'clock on the evening of Saturday, April 13, 1912, and members outside of the society are cordially invited to attend.

PHILIP P. THOMPSON,
Secretary.

CUMBERLAND COUNTY MEDICAL SOCIETY.

A special meeting of the Cumberland County Medical Society was held at the Congress Square Hotel, Friday evening, March 22nd. The principal business of the meeting was to consider the report from the State Committee which has been chosen to consider the matters of Medical Legislation, Medical Charity and Medical Defense. Dr. F. Y. Gilbert, the member of the committee from Cumberland County was called upon to explain the recommendations in detail. Dr. Gilbert stated that the objects aimed at were two-fold:—

Firstly, to place the Maine Medical Association on a par with other State associations in medical progress and

Secondly, To make membership in our State society of more personal value to the members, especially the country practitioners who were unable to attend the county society meetings. He said that the Committee composed of delegates from all the county societies had met and spent a whole day in sifting the data and a pamphlet containing the conclusions had been sent to every member. It was voted at the suggestion of Dr. Warren that each section of the recommendations be taken up and voted upon separately.

Under Medical Legislation, it was voted to endorse the recommendations of the committee on (1) Medical Expert. (2) Voluntary and (3) Emergency Commitments of Insane. After considerable discussion about the question of changes in the State Board of Registration in medicine, it was moved by Dr. Cousins that this matter be referred to the Committee of Medical Legislation of the State Asso-

ciation and they be empowered to present a bill to the Society to be voted upon at the annual meeting.

The matter of Medical Defense Fund was next presented by Dr. Gilbert who read the reports from several States, showing that it was working very successfully. He stated that some such fund was in use in twenty-two State societies. The scant discussion made it appear that the members were not ready to vote on this question and on the motion of Dr. Cousins it was voted to refer the matter of the Medical Defense Fund to the next meeting of the Society for settlement.

The recommendations of the committee relating to medical charities were endorsed *in toto*.

Contract and lodge work was disposed of by the following motion:

Moved that the President appoint a committee of three who will hold a conference with all members of the county society who are now doing contract work and endeavor to formulate a written agreement which will be equitable to all concerned and submit to the next regular meeting for action and signature of all the members.

PHILIP P. THOMPSON,
Secretary.

PORTLAND MEDICAL CLUB.

The March meeting of the Portland Medical Club was held at the Columbia Hotel, March 7th.

There were twenty-two members present.

Dr. Marshall presented a resolution concerning good roads and on a vote of the Club it was passed and sent to the proper authorities.

There were no reports of cases.

The essay of the evening was by Dr. W. W. Robinson, subject, "Obstetric Palpitation and Forceps."

This was a very thorough presentation of the subject and provoked free discussion.

Meeting adjourned.

HAROLD J. EVERETT,
Secretary.

THE WESTBROOK MEDICAL CLUB.

The Westbrook Medical Club held its regular meeting at the home of Dr. Ferren.

Dr. F. Y. Gilbert of Portland read a paper on "Ocular and Nasal Headaches."

Colden's Liquid Beef Tonic

In cases of impaired appetite, gastro-intestinal atony and disorders of digestion due to subnormal secretory activity, Colden's Liquid Beef Tonic

Has Been Found Effective

in arousing the appetite, stimulating the gastric glands, increasing the digestive secretions and the activity, indeed, of all the gustatory organs. When Anaemia is a complication, Colden's Liquid Beef Tonic with Iron is indicated. Sold by druggists.

Sample with Literature will be sent to physicians on request.

THE CHARLES N. CRITTENTON CO.
115 Fulton Street, New York

The subject was dealt with from the standpoint of a specialist and illustrated by stereoscopic views and transilluminations of the nose and frontal sinuses.

The author delved into the deeper recesses of the subject in his usual easy, clear cut style, dealing with the subject in a very able manner.

The next meeting will be held at the home of Dr. A. N. Witham and Dr. Francis J. Welch of Portland has kindly consented to read a paper before the club.

F. L. FERREN,
Secretary.

FRANKLIN.

The regular March meeting of the Franklin County Medical Society was held in Farmington, Thursday, March 21st.

After some discussion of the report presented by Dr. York, it was voted to approve the recommendations of the State Committee concerning a defense fund, medical charities, contract practice and changes in our Registration Board.

Dr. V. O. White of East Dixfield read an interesting paper on "Gastric Ulcer."

Dr. A. H. Weeks of Portland presented a paper on the "Early Diagnosis of Gastric Cancer" which was much enjoyed and thoroughly discussed by all present.

G. L. PRATT,
Secretary.

HANCOCK.

The Hancock County Medical Society held a regular meeting at the home of Dr. R. G. Higgins, Bar Harbor, February 21.

Dr. Higgins read a very interesting and instructive paper on "Treatment of Chronic Bright's Disease."

Dr. G. A. Neal of Southwest Harbor gave a short discourse concerning "The Common Cold."

Dr. Geo. Phillips of Bar Harbor was appointed as representative from Hancock County in reference to the State legislation.

A goodly number of members were present and all tendered Dr. Higgins a vote of thanks for the delicious repast served after the meeting.

G. A. NEAL,
Secretary.

KENNEBEC.

WATERVILLE CLINICAL SOCIETY.

The regular meeting of the Waterville Clinical Society was held at city hall, on Monday, March 18th, at 8.00 P. M.

The paper of the evening was by Dr. W. H. Harris. Subject, "Abdominal Surgery."

A. S. FLETCHER,
Secretary.

OXFORD.

A regular quarterly meeting of the Oxford County Medical Society was held at Cobb's Hotel, Mechanic Falls, on Monday, March the 25th.

A paper on "Rheumatoid Arthritis" was read by Dr. Thomas J. Burrage of Portland. Dr. Burrage has been interested in this subject for some time and described several cases which have recovered under his newer method of treatment.

D. M. STEWART,
Secretary.

PENOBSCOT.

The regular meeting of the Penobscot Medical Society was held at the Bangor House, March 19th.

There were twenty-four members present.

The evening was devoted to the discussion of the subjects submitted in the Committee Report. The Penobscot Society unanimously favored the recommendation of the Committee with the exception of

a Medical Defense Fund which was endorsed by a majority vote of the society.

JOHN B. THOMPSON,
Secretary.

SAGADAHOC.

At the quarterly meeting of the Sagadahoc County Medical Society, held in Bath, Wednesday evening, March 27th, the newly elected officers for 1912 were duly welcomed: Dr. I. C. Irish of Bowdoinham, as President; Dr. A. A. Stott of Woolwich, Vice President; Dr. R. H. Donnell of Bath, Treasurer, and Dr. R. C. Hannigan of Bath, Secretary.

All the recommendations of the State Committee were unanimously endorsed by the Society.

The Society listened with pleasure to a paper on "Contagious Diseases," from Dr. G. H. Coombs of Waldoboro.

R. C. HANNIGAN,
Secretary.

WALDO.

A special meeting of the Waldo County Medical Society was held Monday evening, April 1st. It was unanimously voted to favor all the recommendations of the State Committee.

ADELBERT MILLETT,
Secretary.

PROPER SUPPORT IN ABDOMINAL DISPLACEMENTS.

In displacements of the abdominal viscera, operation treatment is nowadays reserved only for severe and very obstinate cases, since it has been shown that much of the discomfort from which these patients suffer, can be relieved from the wearing of a proper supporter. The "Storm" binder and abdominal supporter has been highly endorsed by many prominent members of the medical profession as an appliance constructed on anatomical lines, meeting all the requirements in cases of visceroptosis. Although this condition is particularly prevalent in women, displacements of the stomach, kidney or both, are not infrequently observed in the male sex, and according to the experiences of Dr. Charles G. Lucas of Louisville, Ky., these cases yield equally well to the use of a proper abdominal support. He further states, that, "for the past two years or more, I have used the supporter devised by Dr. Katherine L. Storm, with decided success. The support given by secondary bandage of canvas and the light straps that encircle the thighs, do away with all the objections to the old-fashioned bandage."—*International Journal of Surgery*, Jan., 1912.

PERSONAL NEWS AND NOTES.

Dr. H. F. Kalloch of Waterville, Me., has been in New York for several weeks, studying at the New York Post Graduate Medical School and Hospital. He will return to practice in Fort Fairfield, about the first of April.

Dr. A. D. Sawyer of Fort Fairfield and Dr. Frank Kilburn of Presque Isle leave on May 3rd for Europe. They expect to do England, Ireland and Scotland in Dr. Sawyer's auto.

Dr. Addison Thayer of Portland, read a paper before one of the New Hampshire County Societies, at a recent meeting.

Dr. B. M. Hutchinson, formerly a member of the Cumberland County Medical Society, has now settled in Chicago.

Dr. Mitchell of Houlton, recently spent a week in Boston.

Dr. S. C. Gordon of Portland, was recently chosen as Presidential Elector.

The fourth year students of the Maine Medical School have been particularly fortunate to have Dr. Henry W. Miller give them several Psychiatric Clinics at the Maine Insane Hospital at Augusta.

We regret to note the continued illness of Dr. I. E. Kimball of Portland, and sincerely wish him a speedy recovery after his twelve weeks' illness.

Dr. John Bowers of Portland, has returned after a seven weeks' stay in Florida.

Dr. E. G. Abbott of Portland, read an illustrated paper at the March meeting of the New Hampshire Surgical Association, held at Nashua, N. H., March 21st. Dr. Frank Lamb of Portland, accompanied him as radiographer.

MAINE EYE AND EAR ASSOCIATION.

The Maine Eye and Ear Association held a meeting at Brunswick on March 16th.

Dr. F. W. Mitchell of Houlton, read a paper on "Clinical Manifestation of Ocular and Nasal Headaches."

Dr. F. Y. Gilbert of Portland, read a paper on "Differential Diagnosis in Ocular and Nasal Headache, with special reference to the Nasal Accessory Sinuses."

Dr. O. S. Vickery of Belfast, read a paper on "Report of Some Interesting Cases."

The next meeting of the Association will be held at Augusta on May 14th.

ALBION H. LITTLE,
Secretary.

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THE ORGANIZATION AND WORK OF AN ANTI-TUBERCULOSIS ASSOCIATION IN A SMALL COMMUNITY.

By A. A. DOWNS, M. D., OF FAIRFIELD.

(Read before the 59th Annual Session of the Association at Augusta, June, 1911.)

One of several reasons I have for bringing this subject before you today is that the work to be described has been in some respects at least successful. Another reason is that while there is plenty of literature available, describing the work done in larger communities, there is none to my knowledge describing the work of an anti-tubercular association in a small community.

Conditions to be met in Central Maine are different from those in some other States, or even in cities of the size of Portland. For decades in the larger cities there have been district nurses, social workers, settlement houses and active boards of health. Tenement dwellers have been taught the principles of sanitation, and to a large extent the boards of health have insisted upon the proper disinfection of houses vacated by people suffering from contagious diseases. In this way, some preventive work has been done, and at least the worst areas of infection have been cleaned up.

When we commenced our work in Central Maine, however, we found house after house occupied by consumptives, where upon investigation we discovered that the tenement had previously been occupied by a family suffering from the same disease. In some in-

stances, a succession of families had occupied the house, each family evidently becoming infected soon after moving into the house. In none of these cases was there any record of disinfection.

In the city of Waterville, we found two areas of infection, one a school in which every pupil that we have examined has shown the symptoms and physical signs of tuberculosis, and one short street in which there were over thirty active cases. In the town of Winslow, on a few streets, we have over fifty cases. One of the social workers who investigated the conditions reported them as bad as in the tenement districts of New York City.

Before any active work could be done, the communities had to be educated up to the knowledge of the disease, and this is the first work which any tuberculosis committee will have to face. This crusade should be started by the medical profession and after being organized can and it seems to me should be turned over to the laity for management. Without the co-operation and support of the community at large it will be impossible to make the work a success. The medical profession must also remain interested in the work and it is one of the greatest problems confronting any anti-tuberculosis association to keep these two great bodies of people working in harmony.

Without financial aid no work of any value can be done and the question of the best methods of obtaining that aid is one of vital importance, in fact I should say of first importance to any community contemplating the organization of tuberculosis work. I believe thoroughly that the State and municipality that benefit so markedly from the work done, should provide this money by direct taxation, but as this is out of the question at the present time, the work must be supported by voluntary contributions from interested citizens. It has been our experience that it is not a difficult matter to raise several thousand dollars a year for this object.

A large amount of preliminary advertising should be done before any effort is made in this direction.

In order for the work to be a success the medical director in charge must be a man with a special knowledge of the disease, and one who is enthusiastic regarding the work. He must also be ready to put in a large amount of his time free. The practice of Phthysiotherapy today is as much a specialty as is that of any branch of medicine or surgery, and there is no better way of acquiring knowledge of the disease than by the control of a large clinic. I believe that the medical director of work of this kind in which there is quite a large element of danger to him and which benefits the community to such a large extent should be paid a salary to at least partially reimburse him for his work.

One of the many reasons why the home treatment of tuberculosis has been and is a failure in the vast majority of cases is that the patient cannot be kept under control at home. If any satisfactory work is to be done it is absolutely necessary that a sufficient number of trained tuberculosis nurses should be employed to watch the patients carefully. The statement is frequently made that one nurse to one hundred patients is sufficient but in our work where the nurse has long distances of sparsely settled territory to cover, it is impossible for one nurse to do the work satisfactorily.

The nurse as a social factor in the home of the tubercular family is important.

Another important adjunct to the work is the business committee, and this committee should be composed of the most influential men in the community.

I believe this is necessary if the work is to be a success. On our board, we have a banker, two physicians, two mill superintendents, a large contractor and builder, a clergyman, two school superintendents, one of the owners of a large department store, and one manufacturer, and to these men can be ascribed, to a large extent, the success of our undertaking.

The aims and objects of an anti-tuberculosis association should be educational, preventive and curative.

The Central Maine Association for the Relief and Control of Tuberculosis was organized in the Spring of 1910 and the first steps towards the organization were taken by the Waterville Clinical Society at its February meeting in that year. After several conferences between a committee appointed by the Clinical Society and one composed of laymen, a society was organized to cover a population of about twenty thousand people. A constitution and by-laws were presented and accepted, and a board of directors elected who have the whole control of the association in their hands.

Before attempting to raise funds for the work an active campaign of education was started, both by the aid of printed matter which was distributed from house to house, and through the press of our city, who very generously gave us a large amount of space in their news columns.

The money for our work has been raised in several different ways, but principally by the team method, the same method that is adopted throughout the country by the Y. M. C. A. in their campaigns. The results were very satisfactory. In four days practically \$3,500 was raised. While I do not believe this to be the proper way of raising this money, yet as long as it must be raised by private contributions, this seems to be the easiest and most successful.

From the very first the work has been successful, both in point of numbers and I think in the character of work done. In a little over ten months we have seen over 280 cases at the dispensary. Three clinics a week are held, two for examination of new, and treatment of old cases and one for the re-examination of old cases.

In addition to this, some time is devoted every week to examination of sputum. Believing that one of the most important departments of our work is the educational, considerable time has been devoted to this subject. A great deal of interest was shown in the exhibit of the State Board, at the Waterville City Hall and at the Fair grounds during the Central Maine Fair in 1909. These exhibitions were in large measure responsible for the inception of the work we are now doing.

There is probably no disease associated with more superstition in the minds of the intelligent classes than consumption. Many educated people have told me that it was very unwise to educate the masses regarding the disease, that tuberculosis would never be controlled, that they would not believe it to be a germ disease, and they knew it was inherited, and then would quote instances to prove their contention. There are a larger number of fatalists in this disease than in any other, but in spite of all this ignorance and adverse criticism even in high places, the results have been good. A larger number of verandas and sleeping porches have been built or screened in than in any or all the years before, and in going about the city and towns a noticeably large number of windows are open to the healing winds of heaven.

At the present time, arrangements are being made to distribute another pamphlet through the mail to every family in Central Maine.

Among the results noted is the increasing number of people who are having the chest examined, perhaps with no evidence of disease, and also in the large number of consumptives who are willing to take sanatorium treatment. Of course the most intensive educational work is being done with our patients who are coming to the dispensary. Before the patient leaves the clinic they are instructed in the dangers of their disease, and are given a sputum box and literature. They are then visited in their home by the nurses, who instruct them in the hygiene of the home, explain the dangers to the other members of the family and teach them how to guard against it.

These patients are shown the value of out door air, of proper food, and of graduated exercise and rest. From those patients visiting the clinic a tuberculosis class is organized, composed of the more intelligent and early cases, and this class is given blackboard talks on the cause of their disease, methods of infection, necessity of out-door air, rest and good food. I also explain to them some of the clinical

signs of tuberculosis. For instance, I tell them their disease is caused by a small germ which they have probably breathed into their lungs, and if they expectorate on the street, the floor, or into a spittoon, they are quite likely to infect some other person.

I then explain why we wish them to stay out of door and not in closed rooms, crowded stores, churches and theatres. I tell them of the value of eggs and milk, not as eggs and milk alone, but because it is our most nutritious diet, and the necessity of dropping those articles of food that derange digestion. I also instruct them as to the value of rest and proper exercise.

Following this, I explain to them that it is not necessary to have a hard racking cough and great emaciation to be tubercular. I tell them that a loss in weight, a marked loss in strength, with a slight hacking cough and an afternoon fever might mean tuberculosis, and advise them if they have neighbors or friends with these symptoms to insist upon their going to some physician or to the dispensary for examination. Quite frequently I quiz these patients upon what I have told them and they are always anxious to answer.

Some one may say that they do not remember what is told them and that it is an utter loss of time to teach these things, but they have proven themselves faithful missionaries to the communities and it has been owing to their work as much as to any other agency that the clinic has been a success. In addition to these methods of instruction, several lectures have been given during the past year, tuberculosis sermons have been preached, schools and educational bodies have been addressed by the medical director and nurses, and in co-operation with the school superintendents a large amount of literature has been given to the school children. In the next school year, it is proposed to have regular lectures given in all of the schools at least once during each term, and it is expected now that we shall establish an open air school.

Before any active curative work is done, we instruct our patients carefully as to the necessity and methods of preventing others from contracting this disease, and we feel that while on examination, no bacilli may be found in the sputum, yet if the patient shows the physical signs of tubercular disease, we are not justified in supposing that case never expectorates germs, and allow him to spit where he may infect others. Every patient, upon the diagnosis being made, is told frankly the nature of his disease, and the danger of infecting others, he is given a sputum box and fillers, with paper napkins and bags, and is told always to expectorate in one or the other and burn them. He is also instructed to hold a napkin before his mouth upon coughing or sneezing, and while, of course, it is not expected that these in-

structions will be carried out in every case, yet it is very noticeable in the clinic with what frequency the napkins are used, and the nurses report a very general use of the cups in the homes. As the results of work done by our society, aided by the Men's Federation, we are getting a fair enforcement of the anti-spitting law. One incident happening in the clinic and showing how the boys obey might not be amiss. Mike was asked where he spit when on the street, if on the sidewalk? and his answer was, "No, you bet I don't. If I did the policeman would come and carry me down the river."

The nurses found many of the patients sleeping in dark, unventilated rooms and in nearly all cases we have been able to change the character of the room, and in many cases have succeeded in securing a better location for the patient. We have had the co-operation of the landlords, in a marked degree, especially the Hollingsworth and Whitney people, who have been willing not only that we should open the windows, and in many cases remove them all together, but they themselves have done many things to make their rents more hygienic. Homes in which the hygienic conditions are very bad and which we are unable to satisfactorily clean up, are reported to the board of health, and we have received their co-operation in every case.

The question of disinfecting houses occupied or that have been occupied by consumptives is one of the vital questions connected with our work, and one to which I have given considerable time. Our work is so recent that I can not produce accurate statistics regarding the past disinfection, but as near as we have been able to ascertain, the value of the disinfection in central Maine has been, to say the least, very questionable, but I am glad to report the inauguration of what seems to be a more careful method of disinfection in Waterville at least. My own impression is after a careful study of our cases in houses reported by the board of health as being disinfected with formaldehyde and permanganate that the results are bad, that it gives a sense of security to the family that is not justified by the results. At the present time, in addition to the use of formaldehyde in badly infected houses, other measures such as painting and papering are being done. Of course it is only fair to say in relation to formaldehyde that the fumigating officers in most of our towns are ignorant of the nature of the germ of tuberculosis and are also very careless as to the method of disinfection. I have had several houses disinfected at 5 p. m., and the families have slept in the rooms that night. In conversations with several prominent sanitarians this last year, I find this to be the generally accepted view.

We are working on a plan in our clinic at the present time by which we hope to be able to ascertain the exact value of our fumiga-

tion in this disease. Statistics have been collected of every case of consumption dying in Central Maine for the last six years, and these, together with our cases discovered at the clinic, will form the basis of our work. A large map of the different towns has been secured with every street plainly marked.

Every house in which a new case is reported to us or in which we find a case of tuberculosis is marked on the map with a pinning flag. This flag remains as long as an active case remains in the house. Upon the removal of the case either by death or otherwise, this flag is removed and a colored tack is inserted in its place. The case is then reported to the board of health and upon their reporting back to us that the house has been disinfected, still another colored tack is put in place. After a certain length of time in which the house is carefully watched, this tack is removed and another inserted. Finally, if no further cases occur in this house, this last tack is removed and the case is dismissed from observation. Also a card index system is kept of all these cases.

Because of the small number of nurses employed at the present time and the fact that we frequently do not know when a family moves, we are not able to perfect this plan absolutely, but we intend to watch the fumigation in our territory carefully. In this branch of our work we are having the co-operation of the physicians, the boards of health, and of the public to a marked extent.

To the patient, at least, the most important part of our work is the curative. While we do not expect to secure very marked results in the home, yet this last ten months, when we take into consideration the number of our patients and the time that can be given to the district by the nurses, the results have been very fair. A dispensary was opened and well furnished for work. One nurse was employed at first, but for the last few months, we have had two and a third one is expected before long.

In the clinics, the following well defined plan has been worked out, the medical and social history of every patient presenting themselves at the clinic is taken by the nurse. The history is quite full and embraces the family history, the past history, present history, and the present complaints of the patient. The temperature, pulse and weight are taken and recorded. A thorough nose, throat and chest examination is made in every case and the sputum is examined in nearly all cases. No patient is examined who is unwilling to remove the clothes from the chest, and thus far we have had only one such patient. A weekly record card is kept, on which are recorded the temperature and weight of the patients at every visit to the clinic. Also on this card is recorded any information of value to the physician that the

nurse may have discovered. Upon the first visit of the nurse to the home, a nurse's visiting card is filled out, which gives information regarding the home and financial conditions. A dispensary record book is kept, in which is recorded the name and address of every patient, the number of visits to the dispensary, with the stage of the disease.

The nurse also keeps a daily journal, in which is recorded the percentage of attendance at each clinic, together with the number of calls made by her at the home. Each old patient is interviewed separately and when possible the nurse in charge of that case is with the physician.

All records are used by the physicians in treating the cases.

While this method is not at all comparable to sanatorium treatment, it is of great value, and has resulted in numerous arrests of the disease, in the last year. But very little medicine is used in the clinic, most of the treatment being symptomatic. The patients who are in the class are only the more intelligent and those who have been carefully watched for a considerable time. Tuberculin is given to these patients twice weekly, the Bacilli Emulsion being used, each patient keeping a careful record of her condition in a tuberculin record book. It is given very slowly and very carefully and while I am not fully convinced that it is a necessary part of the dispensary treatment, yet I do not feel that any harm has resulted, and it has been the means of securing a more constant attendance of these patients. In a majority of the cases treated, the patients have done remarkably well, but whether they would have done as well with the amount of care given them without tuberculin, I am not prepared to say, but with my present convictions I shall continue its use in the dispensary.

Eggs and milk have been furnished such cases as in the judgment of the medical director require them and the patients were unable to purchase them. The board of directors felt that in order to do the greatest amount of good with the amount of money raised, it was advisable to open a small sanatorium with a day camp connected. We were fortunate enough to have a particularly favorable location for the erection of a sanatorium, it being an elevated tract of land situated to the north of and overlooking the village of Fairfield. A building was constructed and was opened for a time last Fall, but it was not until this Spring that it was opened for good. A number of day patients were taken last Fall, but it did not seem to us that the results justified the cost, and no provision has been made this year for this class of patients.

The building used by us is 50 x 15 ft. and has ten-foot open pavilions on either side for the patients' sleeping wards. The building is divided into kitchen, dining room, office, store room and two dressing rooms.

It is thoroughly equipped with running water, closets, tubs, lavatories, etc.

The pavilions are screened in and protected from storms by large windows which can be opened or closed similar to an electric car window.

Electric lights and a telephone have been installed and with a few exceptions the building is very satisfactory. Taken in connection with an administration building which we hope to build next year, it cannot but prove economical and satisfactory. It is our plan to make the kitchen and dining room into a reception room and the office and store room into a locker system. A building of this kind will care for twenty patients and can be built exclusive of the land at a cost of \$150 per bed. This building is used exclusively for women. The men are cared for, at the present time, in tents.

The results obtained by us in the first ten months of our work have been such that it seems to me any community of five thousand or more inhabitants would be justified in starting a similar work, with every expectation of attaining success.

DISCUSSION.

DR. E. W. GEHRING OF PORTLAND:—Having had a brief experience extending over a period of perhaps three years in just the kind of work Dr. Downs has outlined, I can assure you that I consider they have done a remarkable work in Central Maine, a very commendable one, one which every section of the State can afford to emulate. Until one has attempted to do just that kind of work, he cannot possibly appreciate the difficulties which one encounters. As regards infectious diseases, however, I am decidedly on the side of prevention. We are all interested in prevention, prophylaxis as well as the cure of infectious diseases, but I believe that practically all of our efforts ought to be directed towards the prevention of these diseases rather than to their cure after patients have once become afflicted. In the case of typhoid fever there doesn't seem to be any other way of ever stamping out that disease than by prophylactic inoculation against the disease. We are told by authorities on tuberculosis that it is not possible to do the same thing in tuberculosis. Therefore, other methods must be resorted to. Among them, I believe that there ought to be legislation,—and I don't ever favor accomplishing anything by legislation which can be accomplished in any other way—there ought to be some legislation which would make it compulsory for those in the advanced stages of tuberculosis to be segregated. The advanced case is the source of infection, and so long as we treat the incipient cases, doing practically nothing for the advanced cases, we are in the position, as some one says, of the man who is trying to remove the cause of the war by taking care of a few wounded soldiers on the field of battle; or in the position of the man in the boat who is attempting to stop the leak by bailing out the water as fast as it comes in. Therefore in the case of tuberculosis, I should like to see some legislation, compelling advanced cases of tuberculosis to go to some institution provided by the State for that purpose. We ought also to insist in our schools upon the provision of one or two rooms, or more if necessary, for the so-

called pre-tubercular children. It is very much easier to prevent the development of this disease than it is to cure it after it is once developed. This has been done successfully in at least eight cities of the Union and others are taking it up. The newspapers could help in this campaign, if they would, by refusing to publish so-called tuberculosis or consumption cures. Men who employ a large number of individuals in factories or shops could also assist, if they would provide large, airy rooms, or good ventilation, in other words, for their employees while at work, and give them at noon sufficient time to eat their dinner, and if necessary even provide a hot dinner for them; in other words, do something which will assist the patient in maintaining a high degree of resistance against the organism. And finally there is one scheme which has not yet so far as I know been adopted in this country, and which is in vogue in some of the foreign countries, namely, the system of industrial insurance,—which I think is even better than social service work,—whereby an individual is constantly laying up something with which to care for himself or to be cared for in case he is taken ill. It so frequently happens now that the wage earner is hardly able to pay his current expenses. He feels that he must work and he continues to work until he arrives at a point in tuberculosis where treatment is practically of no avail. In the mean time he has infected every one in his family. But if this system were introduced money would be laid up from time to time, enabling the man to take care of himself early in the course of the disease.

DR. WELCH OF PORTLAND:—There are just a few things I would like to say before this meeting is closed. You have heard here this morning a most excellent description of the community tuberculosis work in a moderate sized city. I should like to give you some of our ideas that we have gleaned from similar work in three years, in Portland, and the conclusions we have come to there, at least some of them. You have heard that the work in Waterville has been most successful, and they have certainly done most remarkably good work there. Now in Portland, the conditions are considerably different. We have a city of some fifty-five thousand people, and all the city as a municipality is doing is to employ a tuberculosis nurse who goes out among the different cases which are referred to her. That is all the city as a municipality is doing, employing a nurse to see a moderate number of tuberculosis cases who are in the advanced stage. The other work that is being done in Portland is the so-called tuberculosis class, which has been working now for three years and a half. Now the work of that class is small in comparison with the needs of the town, and our idea has come to this, that for cities the size of Portland, probably the most efficient method that can control this work is the employment of a city dispensary under the charge of the city government which shall be enabled to take care of the tuberculosis cases as it does in the city of Boston. Certainly the work there has been most successful and is enlarging all the time and their interest is growing tremendously. In the tuberculosis class at Portland there are about one hundred cases a year. That is a mere bagatelle to the whole number of tuberculosis cases in Portland, anywhere from eight hundred to a thousand, and probably underestimated at that. And we believe that if a city dispensary would take charge of the work, backed by the city government, to have control of the advanced stages of tuberculosis and a hospital for advanced cases as Dr. Gehring has spoken of, much better results would be obtained than are being obtained at the present time. I think all you can say of the work in Portland at the present time is that the work of the class

is merely educational, and as far as the curative results go, they are extremely small. We have turned out sixteen per cent of cases classed as arrested who have remained so, and that is an exceedingly small number. The reason is that a large proportion of the cases are moderately advanced, practically all in that class. Out of sixty-one new cases, this year, we have had but seven incipient cases of tuberculosis. Now the larger number of cases, of course, are the moderately advanced and those are the ones that we have to deal with, and you know as well as I do what results can be obtained with moderately advanced cases where the only supervision that can be extended to them is that of the tuberculosis nurse and the tuberculosis class. It seems to me and others that the province of the tuberculosis class is perhaps temporary and in a few years must be succeeded, at least in larger cities, by the establishment of the tuberculosis dispensary and hospitals.

DR. ADDISON S. THAYER:—We had a very interesting discussion on appendicitis because two or three disputants jumped in with a difference of opinion. Now in this matter of dispensary treatment of tuberculosis there is practically no difference of opinion in Portland. There is a good deal of indifference and disposition to take advantage of the opportunity to send out our patients to the tuberculosis class, but I have heard very little radical opposition. I understand, however, that in Bangor, an attempt was made on the part of some philanthropic people to establish such a class, and that there was opposition on the part of the doctors. Possibly there may be some Bangor doctors here who can make our discussion lively on this subject.

DR. W. C. PETERS OF BANGOR:—I suppose I might say a word in regard to tuberculosis in Bangor. There is an anti-tuberculosis association there. I am much interested in the work, because in the hospital side of my work about fifty per cent of the cases have tuberculosis in some form or other, sometimes in two forms. A class was started a year and a half ago with indifferent success. It met with considerable opposition on the part of the doctors, owing to a misunderstanding. I think the impression was that they were going to lose business, which is always a perfectly proper attitude for the medical profession to take. I think that opposition has entirely ceased because of the very careful methods which we have pursued in the tuberculosis association, i. e., that of returning every case that is able to pay anything at all to the physician where he had his last treatment for any other complaint or whoever may be his family physician. We have done that absolutely. I think it is necessary. This next year, we propose to do one other thing, to follow out those cases that were sent back, and if we find they are not being properly treated or neglected we propose to pull them back into the class, which I also think is perfectly legitimate. One of our greatest helps is our Associated Charities. We have a wonderful secretary of the Bangor Associated Charities. The minute we get hold of a case we turn it over to her to find out the circumstances. A case was reported, for instance, at the class two weeks ago, a child. A child in the family had just died; suspected that was the disease; found it was; this second child was examined; found it had tuberculosis; two other children in the family; mother a widow; her only available capital was fifty cents and about \$100 worth of furniture; she was examined and found to have tuberculosis in a moderately advanced stage; too sick to work at all. We put the Associated Charity secretary to work. She discovered this woman had a brother-in-law in another State who would be willing to furnish a

limited sum of money toward her support, \$2 a week. We sent her to a house where she had an out door room. Of the two children, one is sent to a home for infants in Bangor, the other to the Children's Home. That is the way we handle the work. Next year, we hope to have a first class trained worker from Massachusetts to continue to do the work and carry it on in the best possible manner.

DR. EMERY OF NEW BRUNSWICK:—In regard to the condition of tuberculosis in New Brunswick, we have a central organization and are getting in process of putting up a sanatorium in the center of New Brunswick for educational and other purposes. In St. John, we have an association there which has a dispensary. The population of St. John is a little less than Portland, about fifty thousand, and the conditions I judge are very similar in St. John as in Portland. We have a dispensary where we have patients come three times a week. We encourage, as far as we can, the members of the families who have advanced cases to come for inspection and examination. We are also trying to get up funds for a hospital for the consumptives of the city and county of St. John alone. That is done by subscription and we have some funds raised already, although I think that, as Dr. Downs has said, the subject is of so much importance it should be supported by the province or the State.

DR. DOWNS (closing discussion):—Our advanced cases we have not made any arrangements for yet except at the home, the nurse following them and doing the best we can in the home treatment. All of our incipient cases, or at least quite a few are taken care of in the incipient hospital which has been used in connection with our work, a short distance above Fairfield. It enables us to take care of twenty to twenty-five patients, incipient cases. Our work in Waterville is practically all tuberculosis dispensary work. Through the winter months, I had a small class, but this summer our class has dwindled down to only three or four. Those patients are given tuberculin and this is purely a tuberculin class.

CORPORATIONS VS. DOCTORS.

By S. F. GREENE, M. D.

For some years past, corporations have been a great obstacle in the way of individual success in various forms of business. So much so, that in some lines of business, individuals have been driven out of their selected occupations and forced to employ themselves in some other vocation, or work for wages. The individuals composing corporations frequently join themselves together in order that they may secure some advantage over their competitors, for the purpose of personal gains of some kind to themselves, or to those whom they represent.

The members of the medical profession, like the members of other callings, are not free from the harassing and damaging operations of corporations. The corporations which exert the most degrading and damaging influence upon the medical profession, are called

hospitals. These corporations are generally conceived by the members of the medical profession, who are desirous of establishing a place where they can deal with the charitable work in which the profession has always engaged, more effectively. But that is about as far as the medical profession can claim any credit for the organization of a hospital's corporation, if indeed, any credit should be ascribed to anybody. When the corporation is really formed, it is composed of laymen, who are actuated more by mercenary, than they are by charitable motives.

Their object is not only to provide a means whereby the poor and unfortunate victim of disease or accident may be relieved of his misfortune by as efficient skill as he might be if he had every means at his disposal by which he might accomplish the object himself; but to furnish a place where the general public can get its doctoring done for a less price than the regular medical profession charges. So the situation is this — the lay corporations (hospitals) say to the public, "All hands come in when you are sick and we will doctor you gratis," and say to the medical profession, "We will give you the honor of doing all of this work for us as long as you will do it for nothing." So the rich and the poor, and the well-to-do flock to the hospitals to get their work done without paying for it. Where do all of these patients come from? From the legitimate patronage of the members of the medical profession. What proportion of them are charities? Probably not over twenty-five per cent, certainly not over fifty per cent. Then fifty per cent of the about five thousand patients which the public hospitals of Maine treat annually, are not charities, and are able to pay for their medical services. This means a loss to the medical profession of the State of from \$50,000 to \$100,000 a year. Everybody can make his own calculations on this point. Thus the hospital corporations, every year, damage the medical profession of this State to the extent mentioned above, and the members of the medical profession itself are the means by which they accomplish it.

The profession has, for years, tried to get some relief from these abuses, and the medical conventions of this State have appointed committees to confer with the trustees of the corporations to see if they would not quit, to some extent, this unjust competition. Sometimes the committees of the medical conventions have been "turned down" by the trustees, in a gentlemanly manner, and sometimes rudely. The medical profession has never got any satisfaction out of conferences with the corporations, and there is no reason to expect any, for when they are getting the public treated for nothing, what more can they ask? And why should they abandon the means by which they accomplish it?

There is no reason why the public hospitals should be regarded as anything but intruders and competitors in our professions, and no reason why they should be regarded any differently than the old time interloper, who used to stop at hotels, and advertise to treat people for a less price than the members of the regular profession charged.

Incidentally, I will say, although I did not intend to discuss, at this time, anything but the pecuniary damage that the hospitals are doing to the medical profession,—that it is a misapplication of the appropriations that the State makes for medical charities of the legacies and of the penny collections that Sabbath-school scholars take for the same purpose, to deal them out to the people worth from ten to one hundred thousand dollars.

As the hospitals, under existing circumstances, are competitions to the medical profession, pure and simple, the profession should do everything in its power to eliminate their harmful operations. Not much can be done along these lines, in our medical conventions, for the profession is divided on the subject, and with the short time allowed by our rules, for presenting a subject and for discussing it, not much, in a business way can be accomplished there anyway. More can be done by physicians of a given locality, having a good understanding that they will not patronize hospitals except when absolutely necessary (this will not be often), that they will insist upon people who do go there without their recommendation, shall stay there until they are well, and shall return there if complications arise in the case for which they were treated, and generally, to discourage people about patronizing them. If the physicians at home should decline to treat a hospital operative case through its convalescence, its would be pretty apt to stay at the hospital until all danger was over, for the man who did the operation would be legally liable for damage if he should allow the patient to go away too soon, and any trouble came from it, unless the patient did so against his instructions. * So, in looking out for his own interest, he would insist upon the patient staying there, until all dangers were past. Common self-respect justifies any physician in this course. Most people go to a hospital to have an operation done to get rid of paying a local surgeon his fee for operation. After he has beat him out of his fee, he wants to come back, and have him do all the unprofitable work there is connected with the case. Why should a physician accept the insult added to the injury? There is a very general feeling among physicians, that the profession is being grossly imposed upon by the hospitals, almost insulted, by telling their patients that, if they will come to them, they will treat them for nothing, thereby compelling the physicians to cut their prices down to a smaller sum than they can afford to work for, or lose their case altogether.

If one can judge of the profession at large, by the sentiment in this section, a large majority of the profession is of this opinion. The vast majority of operations done at the public hospitals are simple cases, that several surgeons in every county could perform very easily. If a physician has such a case, and does not consider his experience and knowledge quite equal to the occasion, it would be much better for him, and the public at large, to call someone who is competent, and assist in the operation himself, and thereby gain some knowledge that he may use in his practice in the future, for the benefit of his patients. One of the great obstacles in the way of handling the situation, grows out of the fact that some men in the profession whom we all respect, are the means by which the hospitals are enabled to do this injury to the profession as a whole.

Probably at least every other time that a hospital surgeon operates upon a patient, he will average to take twenty-five dollars out of some physician's income. It is done thoughtlessly, under the plan of a corporation which has no regard for the medical profession whatever. If the proposition came to him from any other source, to operate upon another physician's patient worth ten thousand dollars, for the sole purpose of preventing the physician from getting his fee, he would indignantly reject it. It seems as though the time had come, when some decided stand should be taken by the medical profession, against the inroads of these corporations into our business. To support them is surely a disadvantage to the medical profession. But those who wish to support them of course, have a right to do so, and those who wish to oppose them have the same right. Each party can work along its own lines. Those who do surgical work, should assist other members of the profession, when asked to do so, for such fees as the physician thinks his patient can afford to pay, even for nothing, until this hospital nuisance is eliminated. By so doing, physicians will come to do their own work more and more, and thus maintain their reputation as well as to save their business.

SURGICAL SUGGESTIONS.

A needle fragment in the fleshy palm, where the muscles are compact and in more or less constant activity, will be displaced more in a few hours than one in the sole of the foot, where the intrinsic muscles are deeper, less compactly disposed and less active, and where, also, the dense plantar fascia sometimes holds the needle. — "American Journal of Surgery."

SHOULD STATE LAWS GOVERN MARRIAGE?

BY DR. J. A. NILE, OF RUMFORD.

In the great National and State cry for conservation of our natural resources, should we lose sight of the present and future value of the human family?

We have reached an era in civilization where the solidarity of the human race was never more manifest; when a man is not allowed to live absolutely for himself alone; his weal or his woe affects the community in which he lives, and directly or indirectly his State and Nation. The State therefore, for the well being of each and all of the citizens, assumes certain responsibilities, formulates and enforces certain laws to protect each individual within his legal rights, and even essays to protect his health, in order that he may not become a burden of care to the State and a menace to the health of the community.

The mental, moral and physical strength of a State varies in proportion, as each individual is mentally, morally and physically well endowed. The State recognizing this fact, has established a Health Department, which supported by the efforts of patriotic and philanthropic citizens, is doing heroic work for the enlightenment of our people upon the laws of hygiene and sanitation, and aided by our present quarantine regulations, and our eleemosynary institutions in warding off disease, taking care of, and curing our sick and unfortunate citizens.

But, unfortunately, there are some hereditary and very communicable diseases, (and they are alarmingly prevalent too) against some of which the State has no effectual quarantine regulations, no exhibits, no literature and no lectures to enlighten, to warn and to protect the untutored and innocent who are daily being sacrificed at the marriage altar.

The only way to protect these unfortunate citizens, is to place marriage under the State Health Department, and require each applicant for a marriage license to present a health certificate from a reputable physician, stating that he or she is suffering from no deleterious hereditary, communicable or infectious disease. The law should state explicitly that feeble minded and insane persons, inebriates, drug fiends, persons suffering from tuberculosis, and the so-called social diseases, gonorrhea and syphilis, cannot contract marriage within its borders.

The sickness, the suffering, the degeneration, and even deaths, caused by allowing these unfortunate persons to contract marriage, with all its direful consequences, are greater possibly than would ensue if we failed to quarantine a few of the diseases against which we now

have quarantine restrictions; because of their peculiar private character and the scope of their involvement upon the general mental, moral and physical health of the community.

Most States require each child before entering school to present a certificate of successful vaccination. This is a wise precautionary measure to protect the health of the community, and for the same reason we should require of each applicant, before contracting marriage, to present a certificate of health.

This would not rob marriage of its romance and pöesy, but rather lift it aloft and purify it, and protect innocent and unsuspecting women and the unborn child, and their children whom we want to be a valuable asset to the State instead of a charge.

Marriage, we all grant, is the most momentous and solemn bond that can be formed between man and woman, and that its asseverating "For better or for worse until death us do part" is either the passport to fields elysian, or to that other place where Milton saw devils on devils damned.

Who can compute the loss, or number the poor victims destroyed through homicides, suicides and premature births, because of unhealthy marriages? Tax payers and philanthropists cannot but feel the growing burdens imposed on them, as shown by reports, of the overcrowding of our prisons, hospitals, asylums for the insane and feeble minded, and homes for children. These burdens will continue to grow larger, so long as the flood gate of destruction is left open. If we were even as careful in the rearing of the human family as in the breeding of domestic animals, many of the evils which now effect humanity would disappear.

The State has certain laws regulating marriage, and it certainly should have a law calling for a certificate of good health from the applicant for marriage, as this would be a step in the right direction to guard against the propagation of disease, criminals and degenerates.

The State of Washington has a State law that requires, that both parties to a marriage contract must submit to an examination by a licensed physician, and obtain a certificate of their physical fitness to wed, before they can secure a license. The law goes further, it prohibits the marriage of any person, man or woman, who is a common drunkard, a habitual criminal, or weak in mind. Mental and moral fitness must be established by affidavits from responsible persons.

That such a code will have a decided effect for good, by way of preventing misery and unhappiness is very evident, and if strictly enforced, it is bound to reduce public expense, by providing for healthier self-supporting future citizens. A law of this character is humane.

After such a law has been in effect, in any State a few years, I

don't believe that it would be possible to obtain such a record as the following: Reported that 74 females gave birth to 559 children with these results: 28 stillborn, 195 died with convulsions, 78 were epileptic, 18 were idiots, 39 were paralytic, 45 had hysteria, 6 had chorea, 11 were insane, 7 had ophthalmia, 27 died in infancy and 105 were apparently healthy. This appalling account illustrates the depravity taking place throughout the country because of improper marriages.

It is true, as a noted judge declared a few years ago, "The vilest mortal that lives can have a marriage license issued for the asking, the law taking a fee, makes a record and leaves the offspring and society to shift for themselves in the best way they can. No thought is taken for the unfortunate, nor for the body politic and the impassable evils that must fall upon all. The church adds its sanction, and ministers aid in making these civil contracts by performing the ceremony with benediction and prayer." Yet, however natural or normal this desire may be, all civilized nations, and even some of the pagan States appreciate the necessity of restricting marriage for the weal of the family and good of the State.

The Greek and Roman legislators were so zealous for the mental and physical health of the State, that they declared all men criminals who did not beget healthy and hardy offspring.

For convenience, I will take up the undesirable for marriage, under three distinct classes, that I may portray them more distinctly to your mind.

I. Feeble-minded and insane persons, inebriates and drug fiends, are each and all unfortunate incompetent sick persons. As the upas-tree, that illy effect everyone that comes beneath its shade and sends its poison deep into the soil, so are these persons. They distract the mental, moral and physical equilibrium of the community and send their damning influence down to posterity. Whether millionaire or pauper, they are unfit to take their proper places at the head of families. They, however need treatment and most of them deserve sympathy; they can but beget their own like and kind. It is they, who are causing our rapid increase of insanity; it is they from whom come our crop of paranoiacs and melancholiacs, among the high born as well as the insanity of the common pauper. They are filling our public and detention schools with feeble-minded incorrigible dullards; the streets of our cities, the reformatories, asylums and jails with moral and mental degenerates, fiends and criminals, and all forms of human derelicts.

Marriage between such persons cannot fail to have a calamitous ending. It means either years of torture, misery, want and neglect, or incompatibility in the home which may end in the divorce court,

or in crime, with neurotic progeny. Parents leave their mental and moral impress upon the characters, dispositions and minds of their children, as truly as they mirror their external physical resemblances upon their faces and forms.

Some authors writing on the subject, say that the human race is rapidly becoming insane; that in time, there will not be sane people enough to care for the insane.

From looking over statistics of different States and the bills before the various legislatures for appropriation of money for taking care of the feeble-minded, insane and other charitable institutions, we are not astonished by the statement. I believe what is bringing about this unfortunate denouement is the absence of effectual health laws to regulate marriage.

2nd. Persons suffering from tuberculosis are physically unfit and should not marry. It is no longer a question, but a fact beyond all doubt, that tuberculosis is a communicable, infectious disease, which is liable to undermine the health of both parents and to predispose the offspring to a strumous or a weakened constitution that will handicap him in the great and strenuous race of life. State health laws should prevent such marriages, both for the good of the family and the State.

3rd, but not least, the so-called social diseases, syphilis and gonorrhea. Without hesitating, you will agree that you would not wish your daughter to marry a man suffering from either or both of these diseases. State health laws cannot be too strictly applied to persons infected with either of these.

Our people would set up a great cry if a child had either scarlet fever, diphtheria, small pox or cerebro-spinal meningitis, and if same was not promptly and effectually quarantined, but you may have hundreds of cases of syphilis and gonorrhea in your midst, and the only word that is ever heard, is HUSH.

The social diseases must be spoken of in the open and not with bated breath; and it must be spoken to young women no less than to young men. The subject of venereal diseases is altogether too largely tabooed among us, and for this reason they continue to rot the core of society; leaving blindness, deformity, invalidism and death in their train disseminate.

The popular conception of venereal diseases, is that they arise by debauchery only. The people are ignorant of the fact that millions of guiltless persons acquire these diseases through common utensils, such as roller towels, drinking cups, stools and in marriage. The people are unaware of the fact, that these dreadful diseases embrace among their victims a vast number of innocent children and virtuous wives. One author states, there are more venereal diseases among virtuous

wives than among prostitutes. The wife and unborn child are surely innocent in every sense of the word. They are incapable of foreseeing and powerless to prevent this injury.

I wish to state to you from an economic point of view, to every State from loss of life, time and money expended in sickness from these two diseases alone, if same could be computed, I believe it would far exceed all the loss to the State, by all of those new classes under the so-called quarantine diseases.

As yet, our State has no law, or code of rules to restrict the ravages of these diseases upon the innocent youths, who are soon to be the fathers and mothers of the land.

Many are the women whose lives are being robbed of their health and happiness by thoughtless men, who either through selfishness or ignorance undervalue the consequences of their rash act.

Instead of the glorious exalting strains of Mendelssohn's wedding march or the bridal chorus from Lohengrin, announcing the beginning of the unalloyed joy of hymens feast, it is too often the knell of doom, consigning the bride to a life of sterile invalidism, or the horror of being unsexed upon the operating table, or to spend the sweetest part of her life under the care of a physician, with possibly the sins of the father visited upon her child, and their children.

It is not a mere theory, it is not a question, but an established fact, that men, yes, criminal men, by their disregard of social hygiene, cause seventy-five per cent of the operations upon unfortunate women; and yet, there are thousands of other women in this State, and other States alike, that never approach an operation, but are suffering in silence or under the care of physicians, all witnesses of this infection.

We, who do much genito-urinary work know, what an alarming amount of these social diseases is existent, and how woefully ignorant and careless are men about being cured of same, who are otherwise intelligent and careful. Many labor under the false notion that gonorrhea is no more than a bad cold (knowledge obtained from individuals and newspaper ads. of one to three days' cure) and do not hesitate to take any chance offered for pleasure, and are therefore indifferent about infection, treatment or cure.

Many do not hesitate to contract marriage against the advice of their physician, before the "Morning-tear" or the occasional drip of the so-called gleet has disappeared. They will refuse to change the date of the proposed marriage for fear of embarrassing the bride. They fail to grasp the fact, that it is more manly to embarrass her by delay, than to invalid and kill her by disease.

If health laws governed marriage, this condition could not obtain, and the men would live more careful and orderly lives. If unfortu-

nately, they did contract these diseases, they would make it their religious duty to have a cure effected or prefer to remain unmarried.

I believe it is not out of place at this time to suggest that I think it would be well, owing to the innate modesty of the parents in leaving the youths of our State in utter ignorance of this important subject, and like many of our people they are untutored on anything pertaining to this subject, except by the act of copulation itself. We should advise and ask that a course of lectures should be given along the line of social hygiene, in all of our high schools, during the junior and senior years. By including such a course, the youths of our State could gain much knowledge from a reliable source, which will enable him to pilot his or her bark safely over some of the worst pitfalls that stand in the path of their every-day life.

The State cannot prevent its men and boys from worshipping at the feet of Bacchus and Satyr, but it can set a price upon their safe return from the feast; by preventing them, if they return steeped in poison from their satyriasis, and deranged with maudlin satiety, from regurgitating their refuse upon the pure robes of its unsophisticated women. By enacting health laws regulating marriage.

Of course it is not to be expected that every debility found in man can be abolished by this method, herein proposed; but it is our duty to encourage health and happiness instead of disease and death, and surely it is only reasonable that no physical or moral wrong shall have the sanction of the church or the State. We know that crime is a disease of our social organization and ineradicable, but that it may be restricted within much narrower limits than at present exist, will not be denied.

Clean marriages are God blessed and if applied generally, would be the salvation of State and nation. Such wedlock means a purer citizenship, a better government, a grander people, with a mental and physical superiority that would attest leadership among the nations of the earth.

Then if we would preserve the integrity of our race and the physical safety of the republic, we must not fail to bring about this benevolent reformation. I believe our duty demands action for the conservation of the present and future generations, yet unborn.

When dealing with a sliding hernia, don't attempt to separate the large bowel from the sac; this attachment carries the blood supply of the gut. Free the sac, not the intestine, and reduce with the bowel as much of the sac as is attached to it. — *American Journal of Surgery*.

SCHOOL HYGIENE AND MEDICAL INSPECTION OF SCHOOLS.

H. L. PUTNAM, M. D., OF HOULTON.

(Read before the 39th Annual Session of the Association, at Augusta, June, 1911.)

The normal child is always healthy in body and sound in character. Home and school are interdependent. The life of a child in school should be harmonious with, and supplementary to the life at home. Its growth in bodily vigor, in strength of character, and in intellectual attainments should be as continuous at school as at home.

Health and character are as important as the acquisition of knowledge. The preservation of the health of a child during the immature period of life is absolutely essential to its normal development in body and mind, while the foundations of character, upon which happiness and success in life so largely depend, are made or marred in the years during which the child is attaining puberty.

The word "hygiene" comes from the Greek, and means *preservation of health*. School hygiene may be classified into:—

1. Hygiene relating to the personality of the child.
2. Hygiene in relation to the acquisition of knowledge.
3. Hygiene in relation to school environment.

1. Cleanliness of body and clothing must be insisted upon in so far as possible for the child's own sake and the welfare of others. In most school statistics skin and scalp diseases are found to out number all other forms of disease and contagious eye diseases come next in frequency. All such children must be excluded, and kept away until the danger of infection is passed.

It is evident that this can only be done by a thorough system of school inspection. Anything short of daily inspection is a very poor protection against acute infectious diseases. The plan which brings before the school physician each morning, every child suspected of acute illness, is the only one that can receive the approval of intelligent sanitarians. The instant dismissal of the child to his home, and the more searching investigation in the home, either by the family physician or the health authorities, is probably the most practical way of dealing with the cases of acute infectious diseases. Chronic infections, also, should be followed beyond the school room. Something must be done beyond the mere declaration that the child is unfit to attend school, if medical inspection is to command the confidence of a practical people.

Some public school children have vicious habits which must be discovered and corrected. Here the medical inspector will depend

largely upon the ability and common sense of the teacher. In some instances there may be a physical basis for vice, and the advice of the physician may do much to correct such habits.

I would repeat that the normal child is always healthy in body and sound in character.

2. All children are not alike in mental power. Backward and dull children need particular care. An inattentive child is often defective in the special senses, possibly slightly deaf or handicapped by imperfect eyes. When a child, bright and active on the play-ground, is restless, inattentive and careless in the school, you may be sure that there is a reason for such want of application. Such children usually have imperfect eyes, and cannot concentrate their vision on their books beyond a very short time. They are apt to be called stupid and lazy, the true condition of the eyes not suspected by the teacher or parent.

The eyes of children are normally hypermetropic and not adapted to prolonged strain. The soft and elastic tissues of the immature eye of childhood yield to the continual strain of accommodation necessitated by school work.

In Boston, Philadelphia and in some other cities, the child of the deserving poor is supplied with glasses, following a proper examination, but in most such cases, as in our own schools, nothing is done and the poor child struggles on, making bad matters worse, until the school days are brought to an end, perhaps still in a primary or intermediate grade with a ruined eyesight.

Over pressure has been called the bane of modern education and has enormously taxed the eyes and brains of children by the multiplicity of studies. College requirements have increased and as a necessary result, the preparatory schools have put greater burdens upon our scholars. The studies required of a growing child should never be allowed to disturb its health or to interfere with proper exercise and rest.

3. Hygiene in reference to school environment is such a large subject to consider that it can be barely touched upon in this paper. It is mainly a question of sanitary science, but of vital interest to us all. School buildings should be healthy in location, well built and equipped with perfect plumbing and sewerage facilities. Proper provision for ventilation is, too, a necessity in every room.

The situation of the windows and the color of the walls and ceiling should be such that sufficient light of the proper shade is available for each and every child.

At the last meeting of the American School Association, the experts present declared that no really satisfactory system of ventilation has as yet been devised for public schools; and that no matter how

elaborate a ventilating plant may have been installed in a school building, pure, fresh air for all the pupils in all the rooms is only obtainable, in many instances, by opening the windows — a maneuver which the inventors of ventilating systems especially deprecate.

Medical inspection of German schools was begun in Dresden, in 1867, when three physicians were appointed to examine children suffering from a contagious disease of the eyes. Not until twenty-two years later, however, was a genuine system of medical inspection inaugurated in that country. In 1898, this system was made general throughout the empire, and an entirely new phase of the work of the school inspectors was developed. The chief characteristic of this method is the great importance which attaches to the hygiene of the scholar, without in any way disregarding the hygiene of the school building.

Wiesbaden was the first German city to make a test examination of all pupils, whereby an unusually high percentage of defects was revealed, of which the pupil, the teacher and the parents were wholly ignorant. The authorities soon realized that a complete physical examination of all the children entering the schools was of the utmost importance and the following plan was adopted:

Systematic examinations are made of the heart, lungs, throat, spine, skin and the higher sense organs (and in the case of boys there is an examination for hernia). The findings are entered on a report blank, which accompanies the child from grade to grade in his school life. Twice a year the teacher records the weight and height of individual pupils. A careful re-examination of all pupils must be made in their third, fifth and eighth school years. It is also the duty of the school physician to give advice to the teachers in regard to the children, and when defects requiring special medical attention are discovered, the parents are notified. It is not expected that the school physicians will give medical treatment to the scholars.

In the United States, Boston seems to be entitled to the credit of establishing the first regular system of medical inspection of schools, in 1894. Although, two years before this the sanitary inspector of New York City had appointed a Medical Inspector of Schools, who was probably the first medical officer of the public schools appointed in this country. In 1894, fifty physicians were selected by the Board of Health to inspect the public schools of Boston. In 1895, nine such inspectors were appointed in Chicago. In 1897, one hundred and thirty-four medical inspectors were appointed by the Board of Health of New York City, with a chief at a salary of \$2,500 per annum. In 1908, the Board of Health of Philadelphia passed a resolution, directing that each one of its fifteen medical inspectors shall visit one

public school in his district each day, inspecting it according to the methods employed in Boston, New York and Chicago.

Since 1894, medical inspection of schools has been largely adopted throughout the United States, and in some States has developed from mere inspection for detecting contagious diseases to systems calling for the most thorough physical examination. Several general State laws, providing for or allowing medical inspection of schools have been passed. In Connecticut, in 1899, the legislature passed a law providing for the testing of eyesight in all the public schools of the State. New Jersey has a law which went into effect in 1903, authorizing board of education to employ physicians, or medical inspectors of schools, and defining their duties.

Vermont followed with a law requiring an annual examination of the eyes, ears and throats of school children. In 1906, Massachusetts passed a law which is comprehensive in its provisions, and as far as I am able to ascertain, the only mandatory State law so far enacted. It requires every town and city to establish and maintain a system of medical inspection by competent physicians for the detection of contagious diseases in the schools. Examination must also be made annually, by the inspectors, of all the scholars for non-contagious physical defects, and their eye-sight and hearing must be tested every year.

In 1909, the legislature of Maine passed an act authorizing the school committees throughout the State to appoint one or more school physicians, and defining their duties, provided, however, the said committees have been so instructed by vote of town at regular town meeting or at a special town meeting called for that purpose. This is a move in the right direction, but what we need in this State is a law similar to Massachusetts — a mandatory law.

Medical inspection of schools is as yet in its infancy in the United States. From the data given, we can see that as a nation we are behind Germany, and, for that matter, a number of foreign countries, in this important movement. We also see from the rapidity with which the movement has spread in this country and the great and increasing interest which it has excited, that its benefits have been widely recognized, and that with intelligent supervision and careful study, a complete and efficient system, not only of medical and sanitary inspection of schools, but of physical education of all school children, both in public and private schools, will in a few more years be inaugurated in America.

A series of elaborate examinations of the eyes, ears, teeth, weight, height, heart and lungs, and in fact the entire physique of the children in the public schools of Brookline, Mass., was recently made, and the interesting results were published, and furnished food for serious study.

Without stopping to quote figures, it would seem that fully two-thirds of all the children in the primary grades of the public schools were suffering from physical defects more or less pronounced.

The question is constantly staring us in the face, whether great and permanent injury to our children's health is not being done in the public schools, because we insist on their beginning school two years too early, when they should be playing in the open air,—and by tedious school hours, ill ventilated rooms and over heated and dried air, we cause much of the bronchitis and pneumonia, not to mention the contagious diseases.

Perhaps the greatest need in the educational world at present is for medical men, sanitarians and architects on the boards of education, men, who, if not themselves experts, are competent to select experts and to judge of their work.

The medical officer of instruction should have charge of all the records and statistics bearing upon the physical condition of the children and of the sanitation of the building, so that he could make a report on any one child, or any one thousand children, should he be called upon to do so. He should also have charge of the instruction of the teachers in hygiene and physical education.

As Dr. Greenwood has ably demonstrated, in his admirable reports of school inspection in Blackburn, England, the teachers are "Our first line of defense" against contagious diseases, against overwork, impure air, and all the deterrent influences which are injuring our children in school. That American teachers are as yet for the most part in abysmal darkness as regards these important matters, is a lamentable, but not irremediable state of affairs.

Dr. Greenwood, with comparatively little trouble, having the support and co-operation of the school authorities, has succeeded in a short time in enlisting the interest and sympathy of the teachers in the Blackburn schools in the health movement, and a number of them have prepared themselves and passed creditable examinations in hygiene and sanitation, thereby not alone obtaining more responsible positions and earning better salaries, but greatly improving and broadening their views of a teacher's duties and responsibilities.

The medical inspector of schools must have a broad, definite, practical knowledge of hygiene, including the factors which produce disease and those which guard against it. The best medical supervision will go even further than this and include an understanding of developmental and corrective physical training.

If there is one sign of the times more pronounced than another, it is that the public school, if it is to survive, must prove to the people that the education it provides is efficient and solid, and that the health

of the scholar shall be in every conceivable way protected and enhanced during his school life.

DISCUSSION.

DR. S. E. WEBBER OF CALAIS:—Mr. Chairman, Gentlemen, I shall detain you a very short time. I have very little to say. I wish to thank Dr. Putnam personally for the very excellent paper he has presented. It seems to me that Dr. Putnam has presented to us a very important subject. If you will notice by the papers today, the various writers have referred to the educational side of medicine—in the paper on tuberculosis, in the recommendations of the committees' reports on venereal disease and on cancer, they refer to the educational part of the work, of the prevention, and that is why I speak of the medical inspection of schools as very important, because I believe, as Dr. Putnam says, that the education of the teachers is not only the first line of defense but it is the principal line of attack. If you educate your teachers and your pupils, your children, to the importance of preventing the diseases that occur in childhood, in school, you educate their parents and you educate the people, and I am satisfied that that is the only way to get at it. You educate the physicians to that effect and they talk to their patients, but they don't reach the mass of the people, they don't explain to them the importance of preventing tuberculosis and of the various contagious diseases. Now medical inspection of the schools may be carried on as it is in the State of Maine, merely recommending the examination of the eyes, examination of the ears, and recommending that those children who present those symptoms be referred to physicians for treatment, or may be extended as has already been spoken of by Dr. Putnam, in the large cities of the country. I had the privilege and the pleasure of talking, this week, with the superintendent of schools in Providence. He happened to be a former classmate of mine and a very personal, intimate friend, who is doing a great work, and I asked him about the medical inspection of schools. And he went on, going over the items that Dr. Putnam has mentioned in reference to contagious diseases, and then he said: "We have another thing, we have a school in Providence,"—by the way there are a good many hundred pupils in Providence, some twelve or thirteen hundred teachers if I remember it—he says "we have another school, a school in which there are three hundred pupils. Those pupils are taken from the different classes and represent the pupils who are considered to be backward, those who have not made their grades, who have been allowed to go from year to year in the same grade without making any advances. When I came to Providence a year ago, it made a great impression on me." And he set himself to work to find out what was the cause of it. They found out that a certain proportion of them had defective vision only—their intelligence was all right but they couldn't see. They found a certain other proportion had defective hearing—their intelligence was all right but they couldn't hear. There were certain others who had simply enlarged tonsils, and adenoids possibly. There were certain others who apparently had only diseased teeth, and certain others that had marked anæmia, from one cause or another. Certain others were under-sized and under-developed. And it was his theory—by the way he had had three years' experience as superintendent of schools, an active, progressive man, and I put a good deal of stock in what he said—his theory is that more than half of those three hundred pupils ought to be in their own appropriate grade. This

education of the public is the one thing that I want to emphasize. The education of the public, of the people through the teachers and pupils, and when they become better educated in regard to the necessity and the importance of school inspection we may get better results, and when we get the pupils, the teachers and the people educated to the importance of consulting a doctor whenever they are slightly ill we shall make a great advance in the prevention of various diseases.

DR. HOLT OF PORTLAND:—The subject of which Dr. Putnam's paper treats is one of the most important to engage our attention, and I am sure we are all indebted to him for the manner in which he has presented it for our consideration. School hygiene and medical inspection of schools can be advocated not only on altruistic grounds but on materialistic grounds. This has been demonstrated in the City of Boston during the past sixteen years, under the leadership of my old friend, Dr. Durgin, Chairman of the Board of Health of that city. Dr. Durgin demonstrated by actual practice that the medical inspection of schools in the City of Boston lessened the frequency of contagious diseases, that is, there were fewer cases in the city when the schools were in session than during vacation, therefore fewer deaths occurred from contagious diseases while the schools were in session than during vacation. It was from statistics compiled from the work of the Board of Health of the City of Boston that Dr. Durgin, as its Chairman, was able to demonstrate this economic loss to the city and thereby induce the Legislature to pass a law requiring the cities and towns of Massachusetts to establish the school physician as a part of their educational system. Therefore, it is a member of our own profession who has been instrumental in first establishing this great altruistic and economic work in this country. This kind of work for the good of the community has been so often inaugurated and supported by members of the Medical profession that the public has come to look to them to promote it. I believe with Dr. Blanchard that the law should be compulsory in this State and require cities and towns to establish the school physician as a part of the educational system. The primary object of medical inspection of schools was to prevent the spread of contagious diseases; but as great as this object is, it is insignificant compared to the benefits that will be derived from the work of the school physician when he becomes fully established in our educational system. This work of the school physician will eventually make such changes in our educational system as to amount to a complete revolution. It will contribute to those changes of mind and body which are so essential for the greatest social efficiency, and naturally lead to the establishment of eugenics.

It will also furnish such complete knowledge in the case records made of each individual during childhood and youth as to completely displace the old system of the practice of medicine for that of the new, of preventing diseases so well advanced in recent years.

The child should be weighed, measured, compared and tested by standards of measurement and the body improved as far as is possible during its growth and development. It has been demonstrated that manual training and industrial schools tend to a much higher mental efficiency than schools carried on without them. It is obvious too, that the quantity and quality of the school work should depend upon the physical condition of the child. This can be carried out in the most efficient way by physical examinations and carefully kept case records of the child. In business it is necessary to have an inventory of anything, in

order to know how to make the most of it. If this is true of material things, it certainly would be of a living, growing child. Hence the need of the school physician to carry on this work,—one of utmost importance to the human race.

DR. PETERS:—There is no question but what the United States is away behind other countries in this work and Maine is behind the other States, but it is all a question of dollars and cents. I was in Dresden last winter. They are holding there an enormous hygiene exposition as large as the world's fair exposition in Chicago, entirely devoted to hygiene. Now while there I was appealed to by some friends of mine who knew I was interested in play-ground work, to see what I could do about having the United States take part in this exhibit. I corresponded with the President, Secretary of State, the Surgeon-General of the United States, the Secretary of the American Medical Association and a half dozen other men in this country, in regard to sending representatives. I got a lot of correspondence, the result of which was that they could not get any money from Congress to make an exhibition. Where Japan is spending half a million, had a building in which they devoted ten times as much space as in this hall to school hygiene alone. So it is in Maine a question of dollars and cents. We have school examiners in Bangor who are instructed to examine the eye and ear and skin lesions. But you would be surprised how well the public is already educated on this. I went to a school committee man in Bangor a while ago. He showed me files, catalogue files of school journals he had taken for years and he knew three times as much about it as I did. He said they had been teasing the city government for money for years and couldn't get it. We need to educate ourselves, we doctors, and stir this thing up and get money out of the city government to carry this thing on. We can do one thing, we can get a systematic training of the teachers without any great expense, and we are going to try and do that in Bangor. They can pick out the children that can't seem to get along and point them out.

DR. WILLIAMS OF AUBURN:—In regard to school work, I wish to say a few words. It seems to me that the best way to educate the public—and you know that only so far as the public stand behind the law can that law be enforced, as instance, the prohibition law—the best way that I can see to educate the public is to publish in the newspapers of the cities a clear-cut, forcible, direct and unmistakable article for the public to read. They will read it. They will read all the divorce news and all that. And if you will say it right out in straight-forward language in regard to venereal disease or in regard to school hygiene, or whatever you say right out straight from the shoulder, the public will read it, and only so far as you educate the public can you enforce any laws which you may make, no matter whether in regard to venereal disease, in regard to school hygiene or in regard to contagious diseases.

DR. PUTNAM (closing discussion):—In this, as in all other matters of reform, progress is slow. But even in our own State there is progress being made in the right direction in this particular, and I thoroughly believe that in the next few years we will see much greater headway made. I saw in a Boston paper in regard to a movement on this line in that city, a few days ago. The present municipal government, it was stated, had chosen eighty inspectors at a salary of \$500, all under the control of a chief at quite a large salary. The duties of those men were explicitly stated. They were obliged to report every morning at certain schools under their charge and were obliged to spend at least three hours every day in the work. That is the largest step ever taken in Bos-

ton on that line. But this matter appeals to me strongly, having been connected in school work in different capacities most of my life, teacher and school officer for years, and I believe it is very important, and I thoroughly believe that we will see to it later that the men chosen to fill these positions be men specially qualified for that particular work, specialists that will receive special instruction, and that they will be able to receive that instruction in our regular medical colleges.

Necrology.

ATWELL WILLIAM SWETT.

One of our older members, Dr. Atwell William Swett of Bangor, died in that city on Wednesday, January 17, 1912, after an illness from heart disease of about a month's standing. He was a son of William Atwood Swett and Mary Putnam his wife, and was born in Hampden, Maine, May 3, 1840. He attended the village schools, the local Academy, and after studying with Hampden and Bangor practitioners, took lectures at Dartmouth, where he was graduated M. D. in 1863. He then took post graduate courses in Philadelphia and New York, and was interne in a Dispensary in New York for a while.

Soon after his term was ended he settled in Munroe, Maine, for a few months and remained there until the middle of 1864, when he was appointed Assistant Surgeon in the Army, and served for two years in the Shenandoah Campaign and farther South. He resigned from active service in 1866, and settled for practice in Winterport, where he remained some seventeen years and in 1884 removed for finality to Bangor, where he practiced about twenty-eight years, retiring only from the infirmities of ill health.

He belonged to the Hancock County and to the State Medical Association, was long a surgeon on the Staff of the Eastern Maine General Hospital, and belonged to many local societies. He was a man of capable performances in medicine and surgery through a long career. He married in July 22, 1868, Miss Elizabeth Patten, daughter of John Ellingwood Patten of Hampden, and is survived by her as well as by two children.

J. A. S.

CALIXTE JOSEPH BAILLARGEON.

This quiet and unassuming member of the York County Medical Society and of the Maine Medical Association was born at St. Fortuna, a little hamlet near Halifax in the Province of Quebec, July 10, 1877, and died, after six weeks of acute neuritis, at Sanford, Maine, December 16, 1911, aged a little over 34 years.

He was at a tender age brought by his parents to Biddeford, Maine, where they were employed in the factories. The boy was educated in the common schools, then in the College of St. Marie Manoir in the Province of Quebec, then at Laval University, where he was graduated with honor, and finally at the Harvard Medical School.

He settled in Sanford, York County and practiced there the remainder of his brief life. He was very fortunate with his practice amongst the French population and was apparently on the road to high fame in medicine when he was suddenly snatched away in death. He was an active member of the County Society, a quiet member of our own Association, and belonged to a large number of French Friendly Societies in York County.

He is survived by a widow, Madame Annie Joncas Baillargeon and by a young son who laments him.

J. A. S.

SURGICAL SUGGESTIONS.

In the palm, foreign bodies, by reason of the direction of the thrust, often point towards the dorsum and, in a general way, towards the center of the wrist, and such movements as they undergo by muscular contractions carry them further in those directions. — "American Journal of Surgery."

When Kocher's method fails to reduce a recent dislocation of the shoulder, it is usually because the surgeon has proceeded too rapidly. Deliberately is the only way to work quickly. — "American Journal of Surgery."

Traumatic aneurysm, after temporary clamping of the artery, can often be treated by suture, if the surgeon goes about it deliberately, when at first impression the case seemed to demand ligation and obliteration of the vessel. — "American Journal of Surgery."

JOURNAL OF MAINE MEDICAL ASSOCIATION

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Editorial Comment.

The Quarantine Facilities at Portland.

There can no longer be any doubt that a great development of the port of Portland is under way.

This development is taking the form of opening still wider the door to the Dominion of Canada, by way of the Grand Trunk Railway.

For many years, Portland has been the winter port of this railway and through it much of the grain and cattle of the Northwest have been shipped to England. The grain elevators, by the way, are among the largest on the coast.

There are three factors which have operated in the past to bring this about, and which are undoubtedly responsible for the expansion at the present time.

1stly. The harbor is easy of access to the open sea. This is a very important consideration to the mariners who have to navigate the ships. A long and tortuous channel from the harbor mouth to the docks is pregnant with possibilities of disaster to the ships themselves and to the reputation of those who navigate them.

2ndly. The harbor is open the year around or practically so. In severe winters ice forms, but the ship channel is always kept clear.

3rdly. The freight haul to the West is accomplished in less time than from Boston or New York, possibly because the goods are transferred more expeditiously from the ships to the cars. At all events the Western customer expects to get his European goods from 24 to 48 hours earlier by way of Portland than from more southern ports. These advantages have gradually attracted the attention of the maritime world, and today the following ocean lines connect with

the Grand Trunk at Portland, to wit: Cunard, Dominion, White Star, Allan, Red Star and Thompson. The other ports with which these ships connect are Liverpool, London, Glasgow, Hamburg, Rotterdam, Bremen and Naples.

The incoming ships are bringing more and more immigrants. This season the number has far exceeded that landed at Boston. Thus up to March 25, the Boston figures were 4,855, while at Portland on April 15, they approximated 14,055.

The next season, a still larger influx is expected and increased accommodations to handle the crowd are being planned for.

These reflections lead up to the query, *what quarantine facilities are the United States making at Portland*, to care for contagious diseases among this multitude?

The quarantine station at House Island has accommodations for forty patients, and it is the only quarantine station at this port. Forty beds for a possible 14,055 patients is not a fair proportion.

On March 2, the *Ascania* was quarantined here for small pox. She carried 636 passengers. When the Washington authorities learned of the inadequate quarantine provision at Portland, the steamer was allowed to proceed to the quarantine station at Boston.

This is unfair to Boston, to ship our contagious diseases thither and it is unfair to Portland that such a condition of affairs should be allowed to continue to exist.

In view of the expanding commerce of Portland, it is to be hoped that the Maine delegation in Congress will see to it that the quarantine accommodations at this port are greatly increased.

Treatment of Lateral Curvature.

Orthopedic surgery has during the past decade claimed a position of especial importance in medicine as might be expected of a science that has appealed to the profession and public alike from such an apparent humanitarian and economic standpoint.

As every community has its quota of the crippled and deformed, objects of pity, charity, or both, living lives of semi-invalidism, humans way below par in the scale of efficiency, encumbered with the misfortune of physical defects for which they are not responsible and the mental torture doubtless infinitely harder to bear, it is not surprising that a body of men devoting their time and energy largely without compensation to the restoration to health of this class of unfortunates deservedly excite the admiration and gratitude of all classes of society and throw luster and genuine honor on the profession of medicine.

One by one the congenital and acquired deformities have been swept into the realm of curable or remediable conditions. Club-foot, knock-knees, bow-legs, flat-feet, Potts disease, congenital dislocation of the hip and many of the paralyses and contractures have already succumbed. Standing out to the last as most intractable lateral curvature has challenged the attention of the ablest Orthopedic surgeons for years.

The announcement by Abbott in the *New York Medical Journal* for June last, that lateral curvature yielded readily and permanently to corrective measures, immediately created an interest among orthopedic men here and abroad commensurate with the importance of the discovery.

The methods advocated by Dr. Abbott at first publicly less than a year ago have been the outgrowth of a careful study of the mechanism by which lateral curvature is brought about and proved that such condition could be experimentally produced. The restoration to the normal could also be accomplished by the application of forces properly directed. The next step being one of maintained over-correction with fixed dressings for a time.

Those familiar with the long line of experiments carried out on actual cases treated before and since the publication of the first article, can but have their admiration challenged by the painstaking checking up of the changes in all stages of the treatment made possible by the skillful use of the photograph and the radiograph. It is doubtful if any corrective measure in any line of surgery has been worked out with so great attention to mechanical details. The reduction methods of Lorenz that excited wide-spread interest a decade ago, while brilliant, obviously lacked as a practical measure that supplied by the reduction of lateral curvature with the immense preponderance of cases in which it is applicable.

That this Journal should have the honor to record the achievement of one of the members of our State Association is a distinct pleasure, and we wish to congratulate Dr. Abbott and his associates who have built up in so short a time a clinic that compares favorably with the long established clinics of the large centers.

The recognition of the scientific character of Abbott's work by the great medical bodies and the interest taken by orthopedic men throughout the country is a fitting tribute to the discoverer and to the spirit of progression that characterizes the profession.

Circular No. 110.

We are in receipt of copy of the new circular, number 110, on the "Diagnosis of Small Pox," which is issued by our State Board of

Health. This circular gives us all the salient points relating to this disease and merits the careful consideration of every physician. The State Board of Health has issued from time to time circulars on important subjects relating to hygiene, all of which have definite value both to the medical profession and the public.

During the past years, there has been comparatively few cases of small pox in Maine, but with the increased facilities of our sea port, and transatlantic travel, we shall have to confront these problems from the increased number of immigrants coming into the State, so that this circular is very timely and represents the experiences of the Secretary of our State Board for a period of some years in this particular field of work.

Sex Relationship.

In a series of papers presented before the Section of Public Health, at the State Conference of Charities and Correction, N. Y., we find a most earnest and sincere plea to the mothers urging a plan of systematic instruction of the sex problems to the child, beginning as early as the third year, or as early in life as the child begins to question its mother as to the source of origin. Attention is called to the fact that evasive replies to these early questions will lead to a continuation of this attitude of postponement on the part of the mother, while the child seeks its answers elsewhere. A barrier has been, unconsciously, built between child and parent that will never be destroyed.

If on the other hand, the mother endeavors to impart to the child some knowledge as to its origin and gradually teaches the growing child the sex relation in plant and animal life, she gradually leads up to the time when the boy or girl can be told its source of origin and the wonderful way nature has provided for rehabilitation, so that on reaching maturity, there will be implanted in the young mind a respect and reverence between the sexes that will go further towards eliminating our present day evils than any other method.

Vaccination.

We note, in a copy of the *Boston Transcript* for Wednesday, February 28, 1912, an article entitled "The Clinic," dealing with vaccination, which is of unusual interest. The article begins as follows, "For a number of years Dr. George W. Gay has been requested by the medical societies of Boston and Massachusetts, to appear at the State House on the occasion of the perennial opposition by various interests neither medical nor sanitary to the laws pertaining to vaccination. For use the present year, Dr. Gay has prepared an excellent

review of what vaccination against smallpox has done for the people of Boston and elsewhere, from which "The Clinic" has permission to select the more direct facts. The efficiency of vaccination is one of the most extraordinary facts of modern medicine, but being of the preventive order lacks the dramatic interest that the public loves to see surrounding a great public work. But the interest is there nevertheless, along with the good to humanity."

It is characteristic of human beings to labor under the excess of fear during any great disaster and to feel a greater security in times of peace. It is forty years since Boston was laboring with the smallpox scare which was controlled and the minds of the public put at rest. During this period of time, the feeling of security has apparently become so great that each year there appears before the Legislature, not only in Massachusetts, but in practically all the States, a group of so-called anti-vaccinationists fighting against this one measure which has undoubtedly saved many lives and made possible the peace of mind of a great mass of people. Every physician is confronted to-day with the apparent fear, in the minds of the public, of the dreaded white plague as shown by healthy people coming to him, not suffering from any symptoms referable to this condition, but, only to make sure that they haven't got it.

This is true of all maladies during an epidemic or a wide-spread infection, but the reaction is equally as dangerous in that the public forget to take the precaution necessary for self-protection and preservation. In the articles referred to, we note that "previous to the discovery of vaccination, smallpox was constantly present in most countries and every twenty-five years or so, violent epidemics swept over the world, carrying consternation, sickness and death to the people and actually devastating communities. It attacked all ages and conditions, high and low, rich and poor, and persisted as long as there was any material upon which to expend its force.

In 1721, more than half the inhabitants of Boston were ill with smallpox and 850 died. Again in 1792, nearly half the people there were attacked and so violent was the scourge at times, that the Legislature was compelled to hold its sessions in some other town. From 1840 to 1873, inclusive, 2,943 persons died from smallpox in Boston, while from 1874 to 1911 a longer period, there were only 343 deaths."

Ex-President Charles W. Eliot of Harvard, writes as follows, "I object, with greatest earnestness, to the suggested repeal of the compulsory vaccination law of Massachusetts. It would be hard to imagine a more barbarous and merciless proposal." He even urges a more stringent set of laws.

Germany, which is the best vaccinated country in the world, is practically free from smallpox.

We have at hand a copy of the report of the Michigan State Board of Health, for the first three months of 1912, showing 293 cases of smallpox in Michigan. 38 cases had a doubtful history, as regards vaccination, claiming anywhere from two years previous to the attack, to fifty or sixty years ago, while 245 were never vaccinated. The report notes that it costs Michigan \$150,000 a year to take care of indigent smallpox patients and to protect the unvaccinated.

It seems strange that a country reaching so high a standard of education as our own, still fails to analyze these facts, convincing in themselves, but seriously considers the removal of the great barrier of public safety. The medical profession was responsible for the enactment of all health laws and must continue to safeguard them, not only facing a financial loss in their endeavor to keep the healthy from being sick, but the unjust criticism of a fanatical group of so-called anti-vaccinators whose sole object is selfishness.

Tubercular Class and Sanatorium Work.

The very interesting paper by Dr. A. A. Downs, shows what can be done in a small community, when enthusiasm and persistent work are united with business methods. One of the main features of the success attained is, no doubt, due to the able efforts of the business committees made up of influential men who actually do active work.

The large number of tuberculosis cases found is surprising, especially in reference to the limited areas defined.

Many of these patients worked in the mills, which may partly account for this. The value of such work as this along educational preventive, and curative lines is unquestioned.

The questions of disinfecting houses that have been occupied by consumptives, is very important. There is no doubt, as Dr. Downs says, that careless fumigation gives a false security. Careful statistics along this line would be very valuable.

We take pleasure in noting the opening of a Sanatorium for work along these lines by Dr. F. J. Welch of Portland, who has had considerable experience in this work. The aim, as we understand it, is to offer a low rate to a limited number of patients and to reduce the necessary extras to actual cost as in other institutions.

In a small institution, by lowering the cost of maintenance, this may be done, as is shown by the low rate of the Central Maine Association Sanatorium.

Work such as this, emphasizes the need of hospitals for advanced cases, which are the source of contagion. The State of Maine must be aroused. The physicians must take the leading part in crystallizing public opinion, until something definite is obtained. The laity must do their share. Local classes should be turned over to the municipality. Local sanatoria under municipal or county control are needed. The work to be done is extensive, but good foundations have been laid by what has been accomplished in Waterville, Portland, Lewiston and Bangor.

County News.

CUMBERLAND.

CUMBERLAND COUNTY MEDICAL SOCIETY.

The second quarterly meeting for 1912 was called to order April 13, at 8.20 P. M., at the Congress Square Hotel, with Dr. John F. Thompson, President, in the chair. There were present seventy-one members and many invited guests, including the senior class from the Maine Medical School.

It was voted to dispense with the reading of the records of the last meeting.

Dr. Thompson announced that he had appointed the following committee to consider the advisability of presenting to the Society some method of dealing with lodge and contract practice: Dr. B. B. Foster (Chairman), Dr. Williamson and Dr. A. H. Weeks.

At the request of the President, Dr. Frank Y. Gilbert told the society the aim of the State Committee in asking the societies to endorse a Medical Defense Fund. Dr. Gilbert referred to the success of such a fund in the States where it had been adopted and read brief reports from the New York and Massachusetts medical societies.

On the motion of Dr. Warren, it was voted by the members present to endorse the suggestion of the committee that the State Society adopt some Medical Defense Fund.

The paper of the evening was read by Dr. Edward P. Davis, Professor of Obstetrics in Jefferson Medical College, Philadelphia. The subject was "Modern Obstetrics."

After the paper a chafing dish lunch was served.

PHILIP P. THOMPSON,

Secretary.

PORTLAND MEDICAL CLUB.

At the Fourth Meeting of the Portland Medical Club, at the Columbia Hotel, April 4th, there were twenty-five members present.

The paper of the evening was by Dr. H. S. Emery, whose subject was, "Erythema Multiforme." The Essayist presented a very thorough analysis of four cases of Erythema Nodosum and one of Erythema Multiforme, which occurred in his own practice.

These cases were vividly portrayed and brought out a free discussion, participated in by Drs. Addison Thayer, John Thompson, Burrage, Williamson, Webber and Warren.

Cases were reported by Drs. Williamson, Whitmore and Webber. Meeting adjourned.

H. J. EVERETT, *Secretary.*

WESTBROOK MEDICAL CLUB.

The Westbrook Medical Club met at the home of Dr. A. M. Witham, for its regular monthly meeting. Dr. Francis J. Welch of Portland gave us a very interesting paper on "Tuberculosis and the value of tubercular classes in the community."

The last meeting of the season will be held in May, at the home of Dr. F. Barrett and our President, Dr. Charles Haynes of Gorham, will deliver the paper.

F. E. FERREN, *Secretary*.

ANDROSCOGGIN.

The regular meeting of the Androscoggin County Medical Society was held Tuesday evening, April 2nd. There were twenty members present.

Action was taken on all the recommendations embodied in the Committee Report regarding Medical Legislature, Medical Charities, etc., and they were practically endorsed by the members.

J. W. SCANNELL, *Secretary*.

KENNEBEC.**AUGUSTA MEDICAL CLUB.**

The Augusta Medical Club was entertained by Dr. H. W. Sampson, at the Augusta House, Monday evening, March 11th. The President, Dr. R. H. Stubbs, occupied the chair. After an excellent repast, the paper of the evening on "Surgery" was read by Dr. R. L. McKay, owing to the unavoidable absence of the essayist, Dr. H. L. Johnson. A very excellent historical review of surgery was presented and evoked much discussion.

The monthly meeting of the Augusta Medical Club, was held at Weavers Restaurant, April 15th. Dr. Scott Hill entertained. Twelve members were present. A lively discussion relative to public health matters took place.

The paper of the evening, on "The Examination of the Cerebro-spinal Fluid in Nervous and Mental Diseases of Syphilitic Origin," was read by Dr. H. W. Hall, assistant physician and pathologist at the Maine Insane Hospital.

Dr. Hall gave the results of the chemical and cytological examination of the cerebro-spinal fluid in Post-syphilitic and Parasyphilitic diseases of the central nervous system.

H. W. MILLER, *Secretary*.

KNOX.

At the March meeting of the Knox County Medical Society, the recommendations of the Committee were unanimously endorsed.

A. W. FOSS, *Secretary*.

PENOBSCOT.

The monthly meeting of the Penobscot County Medical Society, was held at the Bangor House, Tuesday, April 16th.

Professor Raymond Pearl, of the University of Maine, gave a paper on "Modern Conception of Heredity."

There was a business meeting held at 7.30 and supper was served at 8.00.

JOHN B. THOMPSON, *Secretary*.

PISCATAQUIS.

The Piscataquis County Medical Association held its regular meeting at the Court House, Dover, Thursday, April 18th at 8 o'clock, P. M. Dr. Stanley P. Warren of Portland gave a very instructive and entertaining paper on "Cæsarean Section with Skiograph."

The other papers of the evening were "Something about Breast Tumors," by Dr. F. L. Varney and "Treatment of Cancer" by Dr. C. C. Hall.

A Banquet was served at the Blethen House at 7 P. M.

R. H. MARSH, *Secretary*.

WASHINGTON.

The St. Croix Medical Society met on the evening of the 19th inst., at the home of Dr. W. E. Gray of Milltown, N. B. A number of doctors were present, including a few out of town, and a very enjoyable evening was spent. Subject under discussion was "Acute Surgical Diseases of the Gall Bladder." We meet once a month at the home of one of the doctors and always have a very pleasant time.

W. N. MINER.

YORK.**YORK COUNTY MEDICAL SOCIETY.**

The 68th quarterly meeting of the York County Medical Society, was held in the town hall in Kennebunk, Thursday, April 4th. Dr. E. C. Cook of York Village, presided. The minutes of the January meeting were read and approved.

Dr. John D. Butler of Newmarket, N. H., formerly of Biddeford, and Dr. Percy H. Abbott of Goodwin's Mills, were elected to membership.

The applications of Dr. Frederick C. Lord of Kennebunk and Dr. Ivan Staples of Limington, were referred to the Board of Censors. Bills were read and voted to be paid.

Drs. D. E. Dolloff, C. W. Blagden and B. M. Moulton reported a resolution on the death of Dr. C. J. Baillargeon, late of Sanford and a member of this Society. The resolution was adopted.

Dr. Dolloff, as a member from York County presented the various recommendations as set forth in the "Committee Report" and the following action was taken:—Regarding Medical Legislation, Medical Charities, and Medical Defense Fund. It was voted to adopt the recommendation of the Committee and that the delegate to the convention of the State Association be so instructed.

Contract and Lodge Practise. Voted to adopt the recommendation of the Committee with a proviso excluding public service medical work, such as school physician, town or city physician, etc.

A vote of thanks was extended to Dr. Dolloff for his labors as a member of the Committee.

A very satisfactory dinner was provided at the Mousam House.

Dr. Harold A. Pingree of Portland, was the guest of the Society and, at the afternoon session, he presented a valuable paper on "Some Essentials in the Treatment of Inguinal Hernia."

Dr. H. H. Purinton gave a thorough and concise review of the subject, "Gall Stones." Each of these instructive papers was well discussed. Rising votes of thanks were extended to the essayists for their good services.

There were present, Drs. E. C. Cook, York Village; C. W. Blagden and D. W. Wentworth, Sanford; B. M. Moulton, Springvale; H. L. Prescott, Kennebunkport; F. M. Ross, H. H. Purinton, F. C. Lord, Kennebunk; J. D. Cochrane, Saco; C. J. Emery, D. E. Dolloff, J. M. O'Connor, C. F. Kendall, C. F. Traynor, E. D. O'Neill, Biddeford; J. A. Randall, A. L. Jones, Old Orchard.

ARTHUR L. JONES,
Secretary.

Book Reviews.

A Cyclopedia of American Medical Biography, Comprising the Lives of Eminent Deceased Physicians and Surgeons from 1610 to 1910.

By Howard A. Kelly, M. D., Philadelphia and London. W. B. Saunders Company, 1912.

It is hardly proper for me, a contributor to this work, to say anything of the part in which I have been interested. I will, however, venture to say, that a work based on the idea that the lives of well known American physicians should be united into a cyclopedia of their own, instead of being scattered amongst ordinary dictionaries of biography, ought to be encouraged by physicians of today. Dr. Howard Kelly of Baltimore, the distinguished surgeon has given enormously of his time and of his means to publish a book which shall be a monument to those who have gone before and a mine of information for those who are searching for physicians who have done their good work and passed along. With this aim in view, he has enlisted collaborators all over the United States, who have done their useful part in contributions from their respective States. Moreover, anatomists and other specialists in particular branches of medicine have written of their leaders in various eras of the past.

The results stand before me in the shape of two stately volumes containing about a thousand pages, with the lives of deceased American medical worthies arranged alphabetically. To those who wish to aid in forwarding a most praiseworthy task, the book is commended without undue eulogy, whilst to those who are interested in the past of the profession, the work commends itself as well worth possessing.

J. A. S.

PERSONAL NEWS AND NOTES.

Dr. Francis J. Welch of Portland will open, May 1st, his private Sanatorium for open air and rest treatment. It is located in East

Parsonfield, Maine, and will be called the "Maple Crest Sanatorium."

Dr. S. E. Webber of Calais, who has been ill for the week past, is again able to attend to the calls of his profession.

Dr. Chas. E. Johnson of Princeton, Ex-President of the Washington County Medical Society, was in Calais for a few days.

Dr. W. T. Deinstadt of St. Stephen, goes to Boston and New York next week for a short vacation, where he will visit the various hospitals.

The Central Maine Association voted at the last meeting of the Directors to keep their sanatorium open during the winter

months and to accept patients from any part of the State.

Dr. Goldthwaite of Boston, has been the guest of Dr. E. G. Abbott of Portland.

We regret extremely to note the death of Dr. Derry's son, after a very brief illness.

Dr. J. Fred Hill of Waterville, has recently been on a short business trip to Boston.

Arrangements have been made whereby Dr. P. P. Thompson of Portland, will serve as Librarian until the necessary provisions are made by the Council at the State Meeting in June.

Dr. M. L. Young of Oak Bay, New Brunswick, who has spent the winter in Massachusetts and New York States, recently arrived home again and is improved by his well earned vacation.

Dr. and Mrs. Hunt of Greenville, have returned from the Southern States, where they have been spending a few months vacation.

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Arouses the Appetite

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NOTICES.

OLD COPIES OF TRANSACTIONS.

Any member of the Association desiring copies of the Transactions of the Association, for any year, or complete sets, can have them by notifying the Secretary of the Association and paying express charges.

DELEGATES TO STATE MEETINGS.

Annual meetings will be held by all the New England State Associations in May and June. It is hoped that we may be represented at these meetings. If any member wishes to serve as a delegate to any particular State Association Meeting, will he kindly communicate with Dr. W. Bean Moulton, Secretary, 622 Congress Street, at once.

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MAINE EYE AND EAR ASSOCIATION.

The next meeting of the Maine Eye and Ear Association will be held in Augusta, on Tuesday evening, May 14th. Any one interested can receive a copy of the program by writing Dr. A. H. Little, Secretary, Portland, Maine.

MAINE MEDICAL ASSOCIATION.

PROGRAM OF THE PORTLAND SESSION.

WEDNESDAY, JUNE 12, 1912.

*Clinics, 8 - 11.

MORNING SESSION, 11 A. M.

Arterio-sclerosis (Symposium),

T. J. Burrage, Portland.
S. J. Beach, Augusta.

AFTERNOON SESSION, 2.30 P. M.

President's Address.

General Paralysis (Symposium),

H. W. Miller, Augusta.
F. Hills, Bangor.
Herbert Thompson.

Annual Banquet, 8.00 P. M.

Annual Oration, 9.00 P. M.

THURSDAY, JUNE 13, 1912.

MORNING SESSION, 11.00 A. M.

*Clinics 8-11.

"Lead Poisoning in the Water Supply,"

Adelbert Stewart, South Paris.

"Cancer,"

Donald Cragin, Waterville.

Subject, not announced,

E. T. Flint, Foxcroft.

AFTERNOON SESSION, 2.00 P. M.

Election of officers.

Report of Council.

Report of House of Delegates.

Action on "Committee Report."

Sail down the bay and clam bake, as guests of Cumberland County Medical Society.

Ladies' Reception, Lafayette Hotel, 4-6 P. M.

The visiting ladies in attendance at the State Association will receive an invitation to the ladies' reception, to be held at the Lafayette Hotel, Wednesday, from four to six. It is hoped that the privileges of the Portland Country Club will be extended to them during the two days' stay and every effort is being made towards giving them a pleasant time.

*Maine General Hospital, Maine Eye and Ear Infirmary, Children's Hospital.

THE JOURNAL

OF THE

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The Journal assumes no responsibility for opinions expressed by the authors.

VOL. II.

JUNE, 1912.

NO. 11

MODERN OBSTETRICS.*

By EDWARD P. DAVIS, M. D., PHILADELPHIA.

This title may suggest a definition of Modern Obstetrics, and a consideration of the question, "Is there need for change in the prevalent practice of this branch of medical art?" The new must always prove its worth and the necessity for its existence before it can supplant the old.

Modern obstetrics may be termed the practice of obstetric art, in accordance with the knowledge and experience gained by the medical science of today. One may put this differently by saying that modern obstetrics is obstetrics enriched by those improvements appropriate for it which have developed with the development of modern medicine.

As modern surgery has made great strides, so modern obstetrics has borrowed largely from surgery. Asepsis and antisepsis have made possible modern obstetric operations. Improved methods of controlling hemorrhage, a greater knowledge of the anatomy of the genital tract and the abdomen, improved methods of anesthesia, a better knowledge of the avoidance of shock, have all enriched surgery and made it modern, and the same advances have been applied by some to obstetrics.

Modern obstetrics has profited largely by the advances in surgery, in the relation of the human body to infective agents. The natural

*Read before Cumberland County Association, April 13, 1912.

powers of the organism to resist bacteria have received careful study and demonstration. Processes of metabolism, while still a riddle, are better understood than formerly, and some previously unknown diseases have been traced to the perversion of function in the ductless glands of the body. An increased knowledge of diagnosis has proved that many conditions of the abdominal viscera, hidden under the veil of dyspepsia, are now known to be the result of definite anatomical lesions. In therapeutics, the administration of drugs is now limited to a comparatively small number of tried remedies, while antitoxins and vaccines give hope of specific and successful treatment.

Modern obstetrics has profited largely by the advance in surgery, and some of the most serious problems confronting the obstetrician receive solution in this way.

Contracted pelvis has lost much of its terror through the perfection and application of Cesarean section. The mortality of hemorrhage in pregnancy from rupture of the uterus, and accidental placental separation, has been greatly reduced. Ectopic gestation, as a subject, has been enlarged to include placenta praevia, where the ovum is attached outside its usual location, although within the uterus. The application of surgical principles to this dangerous complication has greatly lessened mortality and morbidity.

While surgery may have enriched obstetrics by procedures which some would term radical, on the other hand the value of conservatism has been strikingly illustrated by the knowledge given us by medicine in dealing with infectious disorders. We have, fortunately, passed through the wave of enthusiasm which led us to subject septic obstetric patients to surgical operations. Today, even the employment of the curette as a sharp-edged instrument, is known to be dangerous. Manipulation in these cases is limited to the utmost. Incision and drainage for abscess bears the scrutiny of sound surgical judgment and obstetric experience. Aside from this, a large percentage of septic cases now recover by forced feeding, stimulation, tonics, and properly selected vaccines and sera.

Medicine has enriched obstetrics by valuable knowledge concerning some of the factors causing toxemia and eclampsia. We know that the nitrogenous metabolism of the body is the most important factor in these cases. Our aim is to recognize the condition and to control it before the over-burdened kidneys announce the dangerous complication. Surgery has suggested to us that if toxemia is dependent entirely upon pregnancy, its quickest cure is the removal of the product of conception; but, as in the case of septic infection, advances in modern medicine teach us that the vital condition of the patient and the state of her circulation, especially throughout the lungs, is of

primary importance, and not the immediate removal of the uterine contents. In cases where immediate delivery is indicated, surgery supplements the knowledge given by medicine.

In this brief statement, we have endeavored to call attention to some of the most salient features of modern obstetric science; but we are at once met in the effort to adopt the improvements of modern medicine by the statement that in dealing with parturition one is dealing with a physiological process. It has been said that a half truth is more dangerous than a lie, and this is an excellent example of the saying. Parturition is a physiological process in physiological individuals but not in pathological specimens. Nothing is more perfect than nature's care of the perfectly sound parturient woman who is nourishing within her body a sound embryo, and about to give birth to a healthy child. But what percentage of parturient women today come under this head? If we turn to Germany, where the study of statistics is carried to a high degree of perfection, we find an interesting summary of the mortality of parturition by Unterberger (*Archiv f. Gynakologie*, Band 95, Heft 1, 1911) from the duchy of Mecklenburg-Schwerin during a period of twenty-three years. He finds that among parturient women, 1 in 8,170 died from nephritis; 1 in 1,948 from eclampsia; 1 in 1,480 from tubercular infection.

We know that sanitary science is at its best in Germany at the present day; that the German people are unquestionably the best cared-for nation in the world in every particular; that paternal government reaches its highest development in that country; and these figures must be taken as representing the best possible results in the present stage of science.

If we turn to the United States, the mortality statistics from the Bureau of Census, published by our government for 1908, inform us that for 100,000 of the population, the mortality from the accidents of pregnancy is 1.7 per cent; and this is without the danger from labor or the puerperal period, but from pregnancy alone.

To give a better idea of this, we find that in the years from 1901 to 1905 in the United States, the average deaths of women in pregnancy for each 100,000 of population were 549; between the years 1904 and 1908 inclusive, the deaths occurring in pregnancy before parturition, in each 100,000 of population, varied from 537 to 772.

With such a mortality, is pregnancy at the present time a physiological condition in all cases? The great problems of the world today are largely economic. Even the dogs of war are held in leash by the relative amounts of capital loaned between the nations of the earth. Today the political influence of empire and republic alike, depend upon wages and the cost of living. With increased pressure

upon the poor, — with the rich growing richer and the poor growing poorer, degeneration among the rich and poverty at the other extreme of the social scale, must affect vitally the physical condition of the American people. Pregnancy and parturition are becoming more and more difficult at the two extremes of the social scale. The rapid increase of European population, and the lessened number of those who work and dwell upon the soil, must tend to diminish vitality and development; although the death rate may be lowered, it has not yet been proved that human morbidity has been materially lessened.

Under these circumstances, is it not reasonable to believe that the physiological individual in whom parturition is a physiological process will become even more rare than today?

When we consider the mortality of labor itself, and its complications, we may turn again to Unterberger's statistics and find that one in each 488 cases of labor died of puerperal septic infection. This in a country where medical education is at its highest point, where midwives are most carefully trained, rigidly licensed, and supervised; where hospital facilities are abundant, and a large percentage of the poor receive hospital care. One in each 3,759 cases of labor terminated fatally from postpartum hemorrhage; one in 3,454 from embolism; one in 4,291 from placenta prævia; and one in 10,892 from failure of the uterus to contract.

When a review of the mortality, given by other German authorities for other periods is made, the conclusion is reached that the mortality of parturition in the last twenty-three years has been only slightly improved in so far as puerperal septic infection and tuberculosis is concerned.

Turning again to our government report of the mortality of parturition in the United States, we find that in each 100,000 of population the deaths from 1901 to 1905 inclusive, from puerperal infection average 2,057 yearly. In the years between 1904 and 1908 inclusive, the septic mortality of each 100,000 of population in parturition varied from 2,291 to 3,271 yearly,—an average of 7.3 per cent. The mortality from postpartum hemorrhage in the years from 1901 to 1905 inclusive, for each 100,000 of population, averaged 337; from 1904 to 1908 inclusive, there was an average death of .9 per cent of parturients among each 100,000 of population. Phlegmasia albadolens is considered a separate accident and disease, and in the same periods quoted had a mortality of 911 per 100,000 of population, or in the later period, 3.6 per cent. Puerperal diseases of the breast alone had a mortality in the later period of 1.4 per cent. Other accidents of labor are credited with a mortality of 1.3 per cent.

It is interesting to ask the question, where in the United States is the greatest mortality among parturient women, and why is this so?

In the *Journal of the American Medical Association*, January 6, 1912, Williams publishes a paper giving the results of questions sent to obstetric teachers in this country. His investigation shows that medical schools are inadequately equipped for teaching obstetrics properly, that many of the professors are poorly prepared for their duties and have little conception of the obligations of a professorship. Some admit that they are not competent to perform major obstetric operations; many teachers admit that their pupils are not prepared to practice obstetrics on graduation. One-half of the answers stated that general practitioners lose as many women from puerperal infection as do midwives; while over three-fourths stated that more deaths occur each year from operations imperfectly performed by practitioners than from infection in the hands of midwives. My observation leads me to believe that these conclusions are correct. If we turn from the state of obstetric teaching at the present day to the practice of obstetrics by the general practitioner, we find in the *Journal of the American Medical Association*, January 27, 1912, an editorial article describing the management of normal labor. This article was evidently written by some one selected by the editors of the *Journal*, and may be taken as representing the ideal which this *Journal* sets before the general practitioner in the management of normal parturition. In this paper no mention is made of soap and water in preparing the thighs and vulva of the parturient patient. No mention is made of surrounding the patient with sterile linen during parturition. Rupture of the membranes artificially is deemed advisable, and during labor the perineum should be anointed with petroleum or some other unctuous substance. No method is given for the application of antiseptic solutions to the perineum during the passage of the child. The placenta is to be delivered by pressure on the uterus, supplemented by traction upon the cord. It is taken for granted that the uterus will contract after labor, and in primiparae it is unnecessary to give ergot unless there is a tendency to excessive hemorrhage. After delivery the patient is to be dressed by a napkin placed over the vulva, and no mention is made as to whether this napkin is to be sterilized or ordinarily cleaned. No mention is made of the propriety of sterile clothing, sterile gown, or sterile gloves for the use of the practitioner.

The most reasonable explanation of the character of the advice given in this article, occurs in the first paragraph, where we learn that the writer obtained his most important maxims in obstetrics thirty years ago.

It seems reasonable to conclude that there is room for improvement in obstetric art at the present day, at least in this country, and that obstetrics may well profit by advances in other branches of medicine. How can matters be made better?

We who teach obstetrics admit the unsatisfactory average condition of obstetric instruction. In 1910, representatives of the leading medical schools of the country, in conference agreed that each student, to graduate, must at least have studied thoroughly six cases of parturition. It is our constant effort to improve the clinical teaching of obstetrics. The length of the medical course and the competent instruction now given in biology and embryology, remove this burden from the obstetric teacher; but so great is the subject and so complex that the field is still a large one to cover.

Some of us endeavor to distinguish between our students who become general practitioners and those who develop surgical tendencies and become obstetric surgeons. The first I am accustomed to call men midwives, and to say to the class that they will undoubtedly devote their larger attention to general medicine. Their specialty is diagnosis, and as they become proficient in that they will recognize what they can attempt with success and what they can attempt with disaster. At the Jefferson College the effort is made to thoroughly instruct the class in obstetric diagnosis, paying especial attention to the conditions which indicate that spontaneous parturition is possible and the conditions which show that parturition will inevitably be difficult. The simplest approved procedures in the ordinary complications of parturition are taught as clearly as possible. The senior student is told that it will pay him better in the building up of his practice and his reputation to transfer to hospital a complicated case of parturition, or to summon adequate help by consultation, than to attempt major obstetric operations in private houses with a disastrous result. In the senior year, the major obstetric operations are taught, and throughout the course demonstrated as opportunity arises, full emphasis being laid upon the fact that they are serious procedures, to be learned only by surgical training and experience as an assistant. Those students who show fondness and aptitude for obstetric practice are urged to obtain additional clinical facilities wherever opportunity offers. Some of our students go to the New York Lying-in Hospital, where, I am glad to say, their record is a good one. In spite of the growth in specialties, medicine, surgery and obstetrics are recognized as an essential tripod of medicine and trustees should furnish obstetrics with adequate facilities for clinical instruction.

The mortality rate of obstetric cases in hospital is considerably lower than that given by our census returns. No well regulated ob-

stetric hospital has a septic mortality of over one per cent, in contrast with the 7.3 per cent acknowledged mortality from all sources. We use the phrase "acknowledged mortality" because we believe from experience and observation that an exact statement of the mortality in general practice from puerperal infection can never be obtained. Such deaths greatly injure the reputation of the practitioner and are often reported under other names.

Statistics would indicate that there is room for improvement in obstetric practice, in so-called general practice. Experience and observation of patients brought to hospitals upon whom efforts have been made to deliver by obstetric operations in private houses, lead us to agree with Williams in his statement that the mortality of these operations attempted by the general practitioner, is a very high one. Our worst cases of infection are those sent to hospital after ineffectual efforts have been made to deliver by forceps, version, or craniotomy in private houses.

What can be done in justice to the general practitioner to improve this state of affairs? Is it for the best interests of the general practitioner to attempt the treatment of complicated parturition in private houses? The most successful general practitioners whom we know have repeatedly stated to us that they did not desire obstetric practice, as it interfered with medical practice, and that they did not feel themselves in a position to undertake it successfully. General practitioners often do obstetric work to keep the medical work of the family. Others who are not successful must take any case which they can get. In professional matters, we believe that it pays only to do those things which one can do well. Our observation has led us to believe that the general practitioner of medicine, no matter what his status, can better afford to send his cases of complicated parturition to hospital or to put them in the hands of the obstetric surgeon than to deal with them himself. The general practitioner would hesitate to retain a case of appendicitis, ovarian tumor, fibroid tumor, or ectopic gestation, but he will attempt, without the slightest hesitation, delivery through contracted pelvis, placenta prævia, accidental separation of the placenta, or eclampsia. It is hard to settle, in most parts of this country, fifty miles away from a hospital. Good roads and motor cars make it possible to take emergency cases to hospital. If the general practitioner would perfect himself in diagnosis, he would recognize conditions early, and thus avoid obstetric disaster. It is useless to expect men who were never trained in asepsis and antiseptics to form the antiseptic habit, and without such a habit, successful operation is impossible.

The field of modern obstetrics embraces pregnancy and parturition and all its consequences and complications. To cover this adequately requires surgical and pathological knowledge and experience. Where treatment of a modern nature is applied to parturition, and pregnant cases receive adequate hospital care, one is not surprised to know that the mortality of Cesarean section in uninfected cases in a considerable series, is less than 2 per cent for the mother, and nothing for the child. But even in cases infected, exsanguinated and shocked, Cesarean section will save two-thirds of them; under aseptic precautions forceps delivery with the head engaged, has no maternal mortality and a low fetal mortality; but obstetric surgeons do not make the high application of the forceps without engagement of the head; that elective Cesarean section spares the weak and ill-developed woman the pains of parturition, with a mortality not exceeding one per cent; that ectopic gestation and placenta praevia, under surgical care have a low mortality; that the obstetric surgeon knows better than to perform radical operations upon septic women.

When one considers the circumstances under which the general practitioner is placed when he is confronted with the dangerous complications of parturition, the responsibility thrust upon him, his lack of all the help and surroundings which make hospital treatment satisfactory and successful, the unjust criticism to which he is subjected in case of a bad result, the insufficient compensation, and the tax upon his health and strength which prolonged and difficult cases entail,—one feels that in justice to the general practitioner, as well as to the patient, obstetric practice should be conducted in the same manner in which modern surgery is so successfully done.

THE CEREBROSPINAL FLUID IN NERVOUS DISEASES OF SYPHILITIC ORIGIN.

BY HERBERT W. HALL, M. D.,

Ass't Physician and Pathologist, Maine Insane Hospital, Augusta, Me.

In the diagnosis of nervous diseases of syphilitic origin, the physician is often confronted by difficulties in that it is often impossible to obtain a history of former specific infection and that many times the symptoms are obscure. In these cases the examination of the cerebrospinal fluid proves to be of great aid in arriving at an early diagnosis. The chemical tests are so simple that they can be done in a few minutes by the physician in his office. The findings will often

clear up the obscure cases and the proper treatment can be instituted at once. Since this is so, lumbar puncture and the subsequent examination of the cerebrospinal fluid must be regarded as justifiable procedures in such cases.

Lumbar puncture may be performed with the patient placed in bed, lying on one side, with the body bent forward and the knees drawn upward. Many physicians, however, prefer the sitting position in which the patient should be seated in a chair so that he can bend forward over the back of the chair, or he may sit sidewise in the chair and bend forward, in which position he is to be supported by an assistant. After the usual antiseptic precautions have been observed, the operator locates the space between the lumbar vertebrae that is nearest the level of a line between the upper borders of the superior spinous processes of the ilia. This is to be the site of operation. In the lower portion of this area about 1 cm. from the midline, the needle is introduced, its general direction being slightly upward and inward. As soon as the subdural space is reached, there is a flow of fluid which is perfectly clear in most cases of syphilitic origin. If the pressure of the cerebrospinal fluid is normal, it comes drop by drop. If the fluid comes in a stream, the pressure is increased and this not infrequently occurs. Some advise that this little operation be performed under narcosis and no doubt this may be necessary at times, but as a rule local anesthesia with cocaine or ethyl chloride is sufficient.

The principle on which the chemical tests are based is the fact that in diseases of syphilitic origin there is an increase in the protein content of the cerebrospinal fluid. Hence the fluid for examination must be entirely free from blood. Noguchi observed that this increase in the globulins is more marked and more constant than the "Wassermann Antibody," while in the normal fluid the amount of protein cannot be distinguished by these tests.

Numerous tests have been devised to detect increase of globulins in the cerebrospinal fluid. Of these the ammonium sulphate test of Ross and Jones and Noguchi's butyric acid tests have met with the greatest favor. These two tests are very reliable and their technique is easy.

The Ross-Jones test is performed as follows:

Take 2 C. C. of saturated aqueous solution of ammonium sulphate in a test tube and carefully place upon it 1 C. C. of the cerebrospinal fluid. If the globulins are increased, a white ring appears at the junction of the two liquids similar to the ring produced by Heller's nitric acid test for albumen in the urine. The intensity of the reaction depends on the amount of globulins present. If the reaction produced in this way is doubtful, it is always advisable to thoroughly mix the

ammonium sulphate solution and the cerebrospinal fluid by shaking the test tube. This mixture should be filtered, and the clear liquid thus obtained should be put in a test tube. Add one or two drops of 0.5 per cent acetic acid and heat the mixture. An increase in the proteins causes the liquid to become more or less cloudy.

Noguchi's butyric acid test has the same significance and the reaction is equally delicate. The technique is as follows:—

One or two parts of the cerebrospinal fluid to be examined are mixed with five parts of a 10% solution of butyric acid in normal salt solution and are heated over the flame for a brief period. One part of a normal solution of sodium hydrate is then quickly added to the heated mixture and the whole boiled once more for a few seconds. The actual quantities recommended by Noguchi are 0.1 or 0.2 c. c. of the cerebrospinal fluid, 0.5 c. c. of the butyric acid solution and 0.1 c. c. of normal sodium hydrate solution. The presence of an increased protein content in the cerebrospinal fluid is indicated by the appearance of a granular or flocculent precipitate which gradually settles to the bottom of the tube, the liquid above remaining clear. The rapidity with which the reaction occurs and its intensity depends on the quantity of protein in a given specimen. The greater the amount of protein, the more quickly and distinctly the reaction appears. The granular or flocculent precipitate appears at once or in a few minutes in a specimen containing a considerable increase in globulin. In specimens containing small amounts, the reaction does not occur quickly. Noguchi places the time limit at two hours. If the precipitate has not appeared at the end of that time, the reaction is negative. Normal cerebrospinal fluid gives with the butyric acid test a slight cloudiness and sometimes a turbidity but the granular precipitate does not occur at all or occurs only after an interval of several hours or even after twenty-four hours.

He found this reaction to occur regularly, not only in cerebrospinal fluids of patients suffering from syphilitic and parasyphilitic diseases, but also in all cases of inflammation of the meninges caused by such micro-organisms as the diplococcus intercellularis, pneumococcus influenza bacillus and tubercle bacillus. These acute inflammatory infections are of course readily differentiated from syphilitic and parasyphilitic affections by the cell count, the bacteriological examination of the cerebrospinal fluid and by the clinical symptoms.

The cell count is important. It has been found that in all inflammatory conditions of the meninges there is an increase in the number of cells. By this is meant the cells which correspond to the leucocytes of the blood. A few red cells may be discovered in clear fluids but these are not to be considered in the count. If the cerebrospinal

fluid is contaminated by blood, of course it becomes as useless for a correct cell count as it is for the chemical tests. In such diseases as general paralysis, tabes, and cerebrospinal syphilis the increase in the number of cells is very constant and there is a well marked lymphocytosis. In normal fluids the number of cells varies from 0 to 5 or 6 to the cu. mm. The average may be given from 1.5 to 3. In syphilitic and parasymphilitic disorders the number of cells may be slightly increased or they may be numerous.

The method of counting that is of the most practical use to the general practitioner is perhaps, the direct method. The instruments needed are those used for the ordinary leucocyte count. The stain should be one that does not contain alcohol or an acid as these substances are likely to injure the counting chamber. Nissl's methylene blue is one of the best stains to use. Draw into the white cell pipette enough of the methylene blue stain to reach to one-third of the distance to the mark five, then fill the pipette to the mark eleven with the cerebrospinal fluid, which has previously been thoroughly shaken to insure an even distribution of the cells. This gives us practically an undiluted fluid. After gently shaking the pipette for one or two minutes, a few drops should be blown out in order to obtain a specimen in which the cells are well stained. A drop is then placed on the counting chamber, covered by a cover glass and allowed to settle for a few minutes. The technique is now that of the ordinary leucocyte count except that we have an undiluted fluid. The Nissl stain colors the nuclei of the lymphocytes blue and the thin protoplasm surrounding the nucleus can be readily seen. The polynuclear cells can be recognized by the shapes of their nuclei which are also stained blue. The other varieties are not well differentiated by this method. The important factors are, however, the number of cells to the cu. m. m. and whether or not there is a well marked lymphocytosis. The Alzheimer method is much more satisfactory for a differential count, but its complicated and time consuming technique renders it less suited to the needs of the busy physician.

In the laboratory of the Maine Insane Hospital, thirty-seven specimens of cerebrospinal fluid have been examined during the last four months. In twenty-one cases, these tests, together with the symptoms have determined an undoubted diagnosis of general paralysis. In these twenty-one cases, the Ross-Jones test was positive in all but two, while only one failed to give a positive Noguchi. The cell count was positive in each case. The average number of cells in these cases was thirty-nine to a cubic millimeter and the average percentage of lymphocytes was seventy-eight. In two cases of cerebral syphilis, both chemical tests were positive; the cells were increased in number and

a well marked lymphocytosis was present. Other cases composed of dementia paecox. Manic depressive psychosis, and organic brain diseases of non-syphilitic origin gave negative results.

I think we are justified in the following conclusions:

1. That lumbar puncture and examination of the cerebrospinal fluid should be performed whenever possible in nervous diseases of doubtful origin.
2. That the cell count is a most valuable aid in the diagnosis of such diseases.
3. That the ammonium sulphate test of Ross and Jones and Noguchi's butyric acid test are convenient and give information of great value in diagnosis.
4. A positive reaction of these tests in a doubtful nervous case is presumptive evidence in favor of the diagnosis being a syphilitic or parasyphilitic disease of the nervous system.

THERAPY OF NEPHRITIS.

R. A. PARKER, M. D., OF AUBURN.

(Read before the 59th Annual Session of the Association, at Augusta, June, 1911)

The government mortality statistics for 1909 show the principal causes of death from disease to be:

Pulmonary tuberculosis,	81,720
Organic heart disease,	65,971
Diarrhoea and enteritis,	52,516
Nephritis and Bright's disease,	48,430

But above ten years of age, Bright's disease ranks third only, tuberculosis and organic heart disease taking a larger toll from life.

An analysis of the above statistics convinces one that the kidneys are second to no other vicera in conserving our health and life.

Consequently a study of these organs has ever been of interest to the medical profession.

Beginning with the embryology of these organs we recall that the anlage for the true kidney appears at about the seventh week and is chiefly formed from the mesoderm.

From this mass the tubules appear first as blind saculations. The extremities become dilated into spheric bodies. Capillaries grow to these walls which become invaginated and form the malpighian body, and capsule of Bowman.

The portion of the urinary tube within the cortex of the adult kidney is formed from the mesoderm in this manner. The pelvis

medulla and the ureters are formed from protrusion of the posterior extremity of the Wolfian duct (probably derived from the ectoderm). These protrusions unite with the secreting cortical portion of the tube. However, McMurrich claims that the entire renal tubule is derived from the Wolfian duct. Modern pathology of nephritis or Bright's disease is a superstructure based upon research dating back to the time when knowledge began to be acquired from autopsies of human beings.

Aetius, between 300 and 400 A. D., came to the conclusion that certain cases of oedema and anasarca were associated with hardening of the kidneys.

Avicenna, about 1000 A. D., discovered that in many of these cases the urine was thin, watery and increased in quantity.

But we pass to Morgagni, in the latter part of the eighteenth century, as the founder of modern pathology. Morgagni described, with great pains the clinical and anatomical aspects of granular and contracted kidneys associated with dropsy.

Before his time, dropsies were considered as primary diseases and classified as with or without kidney disease.

Cotugns demonstrated, in 1770, the occurrence of albumen in the urine of dropsical patients.

Cruikshank later showed that certain cases of dropsy were without albumen.

Still later Wells demonstrated the presence of blood and albumen in the urine of scarlet fever.

Early in the nineteenth century, Brande and Scudamore showed that albuminous urine contained less urea than did normal urine.

Bright, in 1827, published his observations. In these he showed that certain dropsies were constantly associated with certain kidney lesions and some other dropsies were as certainly associated with diseases of the liver. Bright's clinical observations of kidney disease, as published in the first volume of Guy's Hospital report, have stood the test of modern clinicians. He also correlated the hypertrophy of the left ventricle of the heart with some forms of kidney disease.

Bright classified kidney disease into three groups:

"In the first, the kidney is apparently in a stage of degeneration, causing this organ to be less firm, yellow, mottled. This may lead to an alteration characterized by tuberos appearance of the surface."

"In the second, the kidney is transformed into a granulated texture as if fine grains of sand had been sprinkled over it, and sometimes innumerable specks of no definite form are equally strewn over the surface. Later the kidney assumes a tuberos appearance as in stage one."

"In the third, the kidney is quite rough with numerous pinpoint projections, yellow, red and purplish. It is hard, lobulated, almost cartilaginous and contracted."

From these groups may be recognized: acute nephritis, chronic parenchymatous nephritis, and contracted kidney, of more recent writers.

Bright held that these groups followed, one as a sequence of the other.

Christison later separated the disease into acute and chronic forms. He also doubted that these lesions were different stages in one morbid process.

He divided the pathological changes as follows:—

"(1) Congestion of the kidneys with or without granular deposits in the substance.

(2) True granular degeneration of cortical or tubular structure.

(3) Degeneration into a smooth homogeneous yellowish grey mass, intermediate in consistence between that of the liver and the brain.

(4) Disseminated tubercles.

(5) Induration of semicartilaginous hardness.

(6) Atrophy with disappearance of proper renal structure and with or without one of the previous morbid states.

(7) Simple anaemia."

These he considered derived from the incipient stage of congestion or reaction, middle stage, with nearly destroyed cortex, advanced stage where the tubular masses were destroyed.

Christison showed that the disease tends to suppress the solids in the urine that it is frequently associated with serious inflammations and severe anaemia and that the body fluids become impregnated with urea.

Some other investigators were opposed to his views. —

Graves considered kidney lesions not as a cause but as a result of oedema. And so investigators groped for more knowledge upon this subject.

Willis was the first to call attention to the fact that albuminous urine occurred in a number of other conditions than had been previously recognized.

French investigators were active in this field of research and Rayer published valuable observations in which he concluded that Bright's disease was an inflammatory condition of the kidney, associated with oedema and albuminous urine containing less salts and urea than normal urine.

He differentiated it from other forms of inflammation which he grouped as rheumatic nephritis.

Solon observed that the symptoms of granular kidney frequently differ from the others especially in an absence of œdema, but were associated with nausea, vomiting and pain.

Germany made the earliest histological investigations but owing to imperfect conception of the finer structures of the kidney added little of consequence.

The skilled anatomist Heule first gave a reliable description of the histology of the kidney. He also gave a careful description of tube casts.

About this time Bowman's great work on the finer structures of the kidney gave new impetus to the study of Bright's disease.

An important period in the study of Bright's disease, as well as in the history of pathology was ushered in by Virchow's article, published in 1852, in the fourth volume of his "Archives" on "Parenchymatous Inflammation."

Before Virchow's time, the idea of inflammation was based on Vogel's definition "Inflammation = capillary hyperæmia + hydrops fibrinosus." Virchow concluded that this view of inflammation was erroneous and advanced the theory that exudate was not essential to inflammation but that the constant characteristic of inflammation was parenchymatous degeneration. His investigations led him to distinguish three forms of nephritis, which he classified as:

1st. Catarrhal inflammation where the cells become granular opaque and break off from the basement membrane.

2nd. Croupous inflammation, where the above cell changes are mixed with a fibrinous exudate.

3rd. True parenchymatous inflammation, which consists of granular swelling and disintegration of the cells, forming a soft detritus.

Much of the literature since Virchow's time has adopted this classification.

In 1859, Arnold Beer, a pupil of Virchow's, wrote a monograph, in which he makes prominent the interstitial changes in nephritis and attaches considerable importance to the epithelial proliferation.

But this was soon followed by Cohnheim's observations which again brought to the front changes in the vascular system.

Later, Weigert's observations made a pronounced impression upon the trend of thought. He held interstitial changes as second to parenchymatous. He distinguished between four intimately correlated forms: Acute nephritis characterized mainly by cellular exudate; sub-acute, characterized by beginning connective tissue growth; chronic nephritis characterized by beginning contraction and granular atrophy characterized by a very complete loss of parenchyma.

These ideas of Weigert were opposed by Ziegler, Nauwerck, Bartels, and to some degree by Senator and others.

Ziegler denied the differentiation between degenerations and inflammation.

Nauwerck denied that the dependence of interstitial changes upon parenchymatous could be demonstrated.

Bartels describes a primary interstitial nephritis, so do also Wagner, Klebs and Councilman.

Senator revives the idea of diffuse nephritis which had been mentioned by Reinhardt and Rosenstein. He also made mention of the arteriosclerotic kidney as different from the interstitial type. He holds that the pathological changes depend upon the course and duration of the disease and these in turn upon the intensity of the irritant.

Senator denies that an acute interstitial nephritis can exist without parenchymatous change. But he disagrees with Weigert as to whether parenchymatous degeneration must always precede interstitial change. He also holds that chronic forms may develop from acute conditions or independently and that they may have acute exacerbations producing new anatomical and clinical pictures.

Klebs brought into prominence glomerulo-nephritis as a special type.

Traube separated the cyanotic and amyloid kidneys from nephritis and classed them as non-inflammatory.

From the foregoing and other discussions the idea of distinct types of parenchymatous and interstitial nephritis became common.

But lately there has developed a change in the application of the terms parenchymatous and interstitial.

Orth uses them in a descriptive sense and applies parenchymatous to predominating changes in the parenchyma, and interstitial to predominating changes in the interstitial tissues.

At a recent discussion of the German Pathological Society, Muller claimed that it was impossible to differentiate between acute and chronic nephritis and that it was erroneous to speak of parenchymatous nephritis because the lesion is always diffuse. He further spoke of the difficulty in an etiological classification and separated degenerations from inflammation of the kidney and recommended grouping them as nephroses, in contrast with nephritis.

Lohlein of Marchand's Institute, believes that in many cases which involve mostly the parenchyma as in cholera, poisonings, pregnancy, etc., there exists no real inflammation but a degeneration which has a great tendency to heal. He believes that true nephritis is inflammatory and has its prototype in the glomerulonephritis and that acute interstitial nephritis must be considered independent.

Horst Oertel, director of the Russell Sage Institute of Pathology, in his lecture delivered on January 14, 1909 (from which lecture I have drawn largely for the above historical sketch) after reviewing the above data and much more, rejects such terms as acute, sub-acute and chronic, for he says as Muller pointed out the terms, acute and chronic have even lost much of their clinical meaning.

"Kidneys are found, at autopsy after a short illness, showing lesions of a character now grouped as typically chronic, and again after long continued illness showing predominating changes of so-called acute character."

Therefore, as regards the pathological process, the terms acute and chronic may even mislead.

Therefore he discards all these terms and summarizes his conclusions as follows:

(1) The term *nephritis* which of itself means inflammation of the kidney and which therefore comprises all the processes which are held to be component parts of an inflammation should have added to it when necessary, descriptive terms not defining particularly the location of the inflammation or its pathogenesis but purely descriptive of the predominating pathological feature of features.

(2) In certain forms of *nephritis* when predominating features are lacking or of minor importance, no such descriptive terms are required. These, he groups as "*nephritis simplex*." This type is represented mainly by varying combinations of parenchymatous degenerations and inflammatory oedema.

(3) When certain inflammatory attributes predominate they are added as qualifications to the term *nephritis*. In this sense he speaks of *nephritis degenerativa*, *exudativa*, *haemorrhagica* and *prolifera*. To signify location add *tubularis* or *glomerularis*.

(4) When in certain kidneys fatty changes occur which assume great prominence, the lesion is spoken of as *nephritis degenerativa adiposa*.

(5) When in such kidneys loss of parenchyma occurs with increased connective tissue growth and marked vascular changes the term *nephritis degenerativa et productiva* is employed.

(6) When the loss of kidney substance is extreme with a thick fibrous corrective tissue growth, marked vascular changes, and the degenerative changes not prominent, he speaks of it as *nephritis productiva*.

(7) Finally, if there exists an atrophy of parenchyma either alone or with marked arteriosclerosis and patchy fibrous tissue growth as typified in the senile kidney, which he says is not really of inflam-

matory character, he calls it *atrophia renum* and *sclerosis renum* respectively.

Oertel adds that combinations of these forms and types can be recognized in a wider sense and should then be named and classified accordingly.

Greene and Brooks in their publication on Bright's disease, separate all kidney lesions into two large classes: (1) Those in which true inflammatory lesions are present in the kidney tissue. (2) Those characterized by degenerative changes in the parenchyma.

They add that although this division may exist theoretically, one never sees a pure type of either class and the division holds only in that in most cases either degenerative or inflammatory lesions predominate. But in opposition to Muller and Oertel, these writers classify nephritis into acute and chronic cases, believing it to be useful in the study and management of Bright's disease.

Under the acute form, they class those conditions brought about by any agent or factor that can cause acute inflammatory foci or active parenchymatous degeneration in the substance of the kidney.

In the interstitial type the agents most commonly productive of such inflammation are mentioned as those vascular disturbances that give rise to sudden hyperemic conditions of the organs.

This may be of neural origin or it may be due to those derangements of the vascular supply that follow exposure to excessive cold, heat, physical, or mental strain.

Sudden checking of the function of other excretory organs, as the skin or bowels, with the resulting hyperemia, may set up a true acute nephritis. Irritants circulating in the blood, such as metallic poisons, alcohol, also spices and condiments, may act in a similar manner. Metabolic substances resulting from abnormal food products, or the abnormal breaking up of normal food products frequently act as irritants.

These writers suggest that some cases of so-called idiopathic nephritis are probably due to this cause.

The actual changes in the kidney substance vary according to the virulence and the rapidity of action of the etiologic agent and the resistance of the renal tissue. It may be said that in general renal lesions manifest the types of inflammation seen elsewhere in the body.

Associated with these changes are casts of various type, composed of degenerated epithelium together with serum and blood. In the parenchymatous type of nephritis casts show more of a fatty or waxy nature accompanied by degenerated cellular material and fatty epithelium, while in the interstitial variety, the casts are narrower and show more of the hyaline character and some few are of a granular nature.

Frequently poisons generated by infectious processes and excreted by the kidneys act as inflammatory irritants, affecting chiefly the renal epithelium and causing degenerative changes. The degenerative type also includes not only those forms resulting from toxemia of diphtheria, sepsis, and certain cases of typhoid fever, also cases of metabolic disturbances which often exhibit degenerative changes of the epithelium without inflammatory manifestations in the renal tissue.

In these degenerative changes, the cells of the convoluted tubules are especially affected and give evidence of acute parenchymatous and later, fatty degeneration.

When the process becomes sufficiently marked, the cell disintegrates or may become desquamated, and when these fragments appear in the urine, it is diagnostic of renal disease, although unaccompanied by blood cells or other products of inflammation.

Casts are formed as above mentioned. These cases heal rapidly and tend to perfect recovery.

Greene and Brooks consider that their chronic inflammatory variety of nephritis is usually a sequel to the acute of the same type, but may follow the degenerative form when it is long continued. They further consider it impossible to differentiate types clinically, since they are but modifications of the same pathological process.

Some writers classify this type of chronic inflammatory nephritis as the large red kidney, the small sclerotic kidney, or the gauty kidney.

These writers differentiate clinically the interstitial from the parenchymatous type, mainly from the history and the urinalysis.

Those cases which show diminished quantity of often turbid urine, with an abundance of albumen also wide granular casts as well as fatty and waxy casts, together with fatty epithelial cells, are classed as parenchymatous. Those cases, which show increased quantity of pale urine having low specific gravity and but a trace of albumen, together with a few hyaline and pale granular casts, are classed as interstitial nephritis.

In either case, the functional activities are diminished, excretion is lessened and the urine appears to show more the nature of osmosis or simple filtration.

The overgrowth of connective tissue also works harm through pressure so that the upper parts of tubes become dilated and cysts form simultaneously those of congenital origin. When there is a slow development of these conditions, there is an effort of nature towards compensation and increased excretion is attempted by other organs, especially the skin and bowels.

Therefore when these become diseased, the additional work thrown upon the already diseased kidney may cause hyperemia and an exacerbation of the inflammatory process which ends fatally.

When the generation of new parenchyma cells keep pace with their destruction the process may continue until some outside influence breaks the compensation. Thus the disease may run a prolonged course and the patient may even pass through infectious diseases and similar processes quite as successful as those with sound kidneys. Since Bright's disease is commonly considered as the result of some other disease process and dependent largely upon the functioning powers of the other viscera, its treatment must include the treatment of other organs.

Thus many cases are associated with changes in the vascular system and secondary changes in the liver and gastrointestinal tract. A vicious circle is formed and the sequence of lesions is difficult to determine. More or less arteriosclerosis is present, and, in the inflammatory forms, is especially manifested by a rise in blood pressure. This increased pressure leads to cardiac changes and secondary changes in the liver.

On the other hand, renal changes may be secondary to a myocarditis or to valvular lesions of the heart, which lead to renal congestion.

Diminished, highly colored urine, swelling of face, wrists, ankles or ascites. Or perhaps a chill with mild pyrexia, rapid pulse with increased pressure, checked perspiration, dry harsh skin, frequently severe pain in the back, albuminuria hemoglobinurea, readily suggest acute Bright's disease. However, it does not indicate whether it is primary or secondary. Occasionally uremic symptoms occur early and suggest an acute exacerbation.

Anemia and dyspnea appear early and suggest the probable hem-

olyss due to retention of excrementitious substances in the blood. The diagnosis of chronic Bright's disease is not so easy.

We can no longer rely with certainty upon the chemic and microscopic examination of the urine. Even when we couple with this ureteral catheterization, the phlorodgin and methylem blue test, and employ sphygmomanometer, absolute evidence may be wanting in some cases. The family history as to nervousness and gout, or more important, the personal history of infectious or venereal diseases, nerve strain, habits of eating and drinking, are all important. Also the amount of solids in a twenty-four hour specimen of urine. Headache is a common symptom. The ophthalmic symptoms must not be neglected. The so-called cardiac asthma is very suggestive of renal disease.

Greene and Brooks say "There is no more severe test of the skill of a physician than the management of Bright's disease. In no class of disorders is it more certain that each case must be treated individually. Therefore no routine method of treatment can safely be adopted."

It is very important that all viscera of the body should be examined.

In no disease is rest of more importance than in acute Bright's disease. This should be both physical and mental.

Large airy rooms, with an even temperature of about sixty-eight to seventy-two degrees is best.

It is desirable to wear flannel next to the skin to avoid sudden chilling of the body.

To relieve pain, cupping or leeches are to be preferred.

Yet, in extreme cases, morphine hypodermically or chloral by rectum is used.

Regulation of diet is very important, and, for a short time, in acute cases, should be the minimum.

Milk is to be preferred; say one quart or a quart and one-half in twenty-four hours.

Although a strictly milk diet may not be advocated throughout the course of the disease, it should form the basis. In some instances, carbohydrates may be cautiously added.

Oatmeal, arrowroot, and barley gruels are much used, and may be used with cream.

In convalescence, fresh raw eggs and white meats may be allowed, also oysters, fresh fish and occasionally for needed stimulation, red meat in small quantity or its expressed juice. In the acid stage, meat extractives such as beef tea, mutton and chicken broths, are decried by some as being too irritating.

Koranyi and others have shown that there is retention of NaCl in most forms of nephritis, which causes an excess in the blood.

This in turn through osmosis retains water in the tissues and excrementitious substances in the blood. It is also said to increase albuminuria.

Therefore a salt-free diet is indicated.

The use of water is a much mooted question. Some would use it freely in all cases to dilute the blood and flush the kidneys. Others say that it increases arterial pressure and circulation in the kidney, therefore it not only tends to prevent rest, but, in retention, increases dropsy.

Prof. Von Noorden in his monograph on nephritis, holds that as water is badly excreted in acute nephritis and sometimes in sub-acute its use is illogical.

However, in those cases where there are marked toxic symptoms and œdema is absent, Green and Brooks would use water quite freely unless a considerable portion is retained.

The last named authors frequently use herb tea made from violet flowers. They also suggest flaxseed and elder-flower tea.

Forchheimer, in those cases where there is oliguria with much albumen, dropsy increasing, uremia threatened, gives just enough to quench thirst.

But when these symptoms change so that urine increases and albumen lessens, then he would flush the kidneys as well as cautiously increase the diet.

Diaphoresis stands at the head of means employed to relieve retention. Kovesi and Roth-Schulz say that in this way, ten to twenty per cent of substances that pass out in urine may be removed through the skin.

Laenbe calls attention to the possible production of uremia by copious sweating and recommends the ingestion of large quantities of fluid to prevent this.

But Forchheimer states that whereas it is true that uræmic attacks have occurred after profuse sweating, all patients with dropsy may be safely treated in this way; and he further states that he has seen even where dropsy was absent, excellent results produced in patients with uræmic coma, where the administration of water per os was impossible.

Among the agents employed to produce diaphoresis, hot air is preferred, yet, in the presence of cardiac symptoms, hot packs or baths are more safe. -

For relieving retention and œdema, catharsis is hardly second to diaphoresis.

The most approved drugs for this are calomel, jalap, salines and elaterium. Furthermore for the relief of œdema which should receive early attention, acu puncture is an important addition to the above laxatives.

It is advisable to remove all possible dropsical fluid by mechanical means and in so doing much irritating material is abstracted.

Before renal compensation sets in, diuretics should not be employed as a routine treatment.

However, in myocardial weakness digitalis may be used and thereby rest the kidney by regulating its circulation. In some cases diuretin, caffein, theophyllin may be administered. In excessive blood pressure, the nitrites should be used to avoid acute dilation of the heart. To determine pressure, the sphygmomanometer is important. In the inflammatory type of the disease, over-action of the heart may require

aconite and sometimes in the degenerative form, digitalis or strophanthus is used.

Hydrotherapy is recommended for pyrexia. When fever is high, antipyrine may be prescribed instead of cold externally.

For vomiting, ipecac or calomel are of value.

Iron is indicated for the anæmia.

Convalescence should be closely watched.

The treatment of convalescence passes into the early treatment of what is called chronic Bright's disease.

The diet is gradually increased and the mild mineral waters freely used. For the chronic states an equitable climate should be chosen and such occupations as lead to the most approved hygienic living. In general, the treatment should be based on obtaining and maintaining renal compensation.

The principles of diet are the same as in acute nephritis, but with much more latitude in the choice of foods.

Salt should be curtailed and condiments and highly spiced sauces excluded.

Since blood pressure is such an important factor in retaining renal compensation, the condition of the heart should be closely watched and its energies conserved.

The iodides and nitrites are indicated for arteriosclerosis.

Nitroglycerine has been highly recommended where sclerosis of the arteries is marked. Owing to the effect of psychic influences on renal circulation, treatment should be aimed toward serenity of the mind.

Cases of chronic Bright's disease should always be kept under observation and symptomatic treatment employed when necessary.

Urdemia calls for skill, promptness and decision.

Here the kidneys are already incapable of doing their work, the system is overwhelmed with toxic material, therefore elimination must be accomplished through the other emunctories, the skin and bowels must do vicarious work for the kidneys. Elaterium is most reliable for the bowels and dry hot air is to be chosen for the skin.

Pilocarpine hydrochlorate is highly recommended for its power of increasing secretions.

To aid in purifying the blood venesection may be employed, also transfusion.

To check convulsions, A. L. Loomis uses morphine, yet Dickinson restricts its use to the lardaceous kidney.

In the contracted kidney of chronic nephritis, Tyson prefers bromides and chloral.

Forchheimer prefers chloroform on account of its prompt action but in continued convulsions he uses morphine with adults and chloral with children.

In puerperal convulsions, *Veratrum viride* is recommended in large doses.

For heart failure, nitroglycerine, caffeine and digitalin are employed hyperdermically.

When not of myocardial insufficiency, renal asthma is relieved by morphine.

Morphine is even used to relieve headache when the bromides with or without ergot and the caffeine preparations fail.

Time does not permit me to discuss operative treatment as performed by Geo. M. Edebohls, nor have I had time to give details concerning much of the above mentioned treatment. Nor can I mention specific cases.

However, thanking you for your attention and hoping to hear a free discussion of this subject, I yield the floor to you.

A NEW AND PROMISING AGENT FOR THE TREATMENT OF RHEUMATISM.

An announcement that is certain to cause wide-spread interest among the profession is being made in a large number of American medical journals in behalf of Rheumatism Phylacogen. The new product is a bacterial derivative originated by Dr. A. F. Schafer of California. The term "phylacogen" (derived from two Greek words—the equivalent of "a guard" and "to produce") means "phylaxin producer," phylaxin being a name that is applied to a defensive proteid found in animals that have acquired an artificial immunity to a given infectious disease.

Rheumatism Phylacogen (Schafer) is a sterile aqueous solution prepared from a large variety of pathogenic bacteria, such as the several staphylococci, *Streptococcus pyogenes*, *Bacillus pyocyaneus*, *Diplococcus pneumoniae*, *Bacillus typhosus*, *Bacillus coli communis*, *Streptococcus rheumaticus*, *Streptococcus erysipellatis*, etc. The basic Phylacogen is a "polyvalent" preparation, since the organisms are obtained from cultures made at frequent intervals and from a variety of sources. To this basic material is added an equal amount of the filtrate obtained by similarly growing and treating the *Streptococcus rheumaticus* of Poynton and Paine. The product is indicated in all cases of rheumatism, acute and chronic, not due to gonorrheal infection. It is marketed in sealed glass vials of 10 Cc. capacity and may be administered subcutaneously or intravenously, the former method being preferred except in cases in which quick results are demanded.

Rheumatism Phylacogen, which is the first of a series of phylacogens originated by Dr. Schafer and about to be offered to the medical profession, has been thoroughly tested clinically in many of the leading hospitals, as well as by competent specialists and other scientific men in various parts of the country, and is said to have shown brilliant results in a large percentage of cases. With the co-operation of Dr. Schafer, and in accordance with his methods, it is prepared by Parke, Davis & Co., in whom are vested the sole rights of manufacture and sale. Physicians who are interested in this new treatment for rheumatism, and every general practitioner ought to be, will do well to get descriptive literature on the subject. It may be obtained by addressing the manufacturers at their principal laboratories in Detroit, Michigan. Ask for the "Rheumatism Phylacogen pamphlet" and mention this journal.

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Dr. J. L. Murphy, Lewiston.	Dr. R. J. Wiseman, Lewiston.
Dr. Wm. Ness, Lewiston.	Dr. A. E. Wyman, Sabattus.

AROOSTOOK COUNTY MEDICAL SOCIETY.

Dr. E. C. Bates, Houlton.	Dr. Frank Kilborn, Presque Isle.
Dr. F. E. Bennett, Presque Isle.	Dr. R. J. Kincade, Mars Hill.
Dr. F. F. Bigelow, Island Falls.	Dr. L. R. La Fleche, Caribou.
Dr. Sherman Boone, Presque Isle.	Dr. F. F. Larabee, Washburn.
Dr. W. G. Chamberlain, Fort Fairfield.	Dr. A. B. Libby, Smyrna Mills.
Dr. A. B. Damon, Limestone.	Dr. S. D. Little, Caribou.
Dr. T. L. Dickison, Houlton.	Dr. Fred W. Mann, Houlton.
Dr. E. H. Doble, Presque Isle.	Dr. W. F. McNamara, Presque Isle.
Dr. H. L. Dobson, Ashland.	Dr. F. W. Mitchell, Houlton.
Dr. L. E. Dudley, Presque Isle.	Dr. I. W. H. Porter, Caribou.
Dr. P. B. L. Ebbett, Hodgdon.	Dr. J. S. Potter, Houlton.
Dr. A. J. Fulton, Blaine.	Dr. H. L. Putnam, Houlton.
Dr. W. B. Gibson, Houlton.	Dr. A. L. Sawyer, Fort Fairfield.
Dr. Percy Gilbert, Linneus.	Dr. Alfred D. Sawyer, Fort Fairfield.
Dr. Gould, Presque Isle.	Dr. Geo. H. Schneider, Island Falls.
Dr. A. B. Haggarthy, Ashland.	Dr. W. E. Sincock, Caribou.
Dr. H. H. Hammond, Van Buren.	Dr. F. W. Tarbell, Smyrna Falls.
Dr. Chas. H. Harmon, New Sweden.	Dr. C. F. Thomas, Caribou.
Dr. F. O. Hill, Monticello.	Dr. Geo. Upton, Sherman.
Dr. H. J. Hunt, Island Falls.	Dr. P. M. Ward, Houlton.
Dr. L. H. Huggard, Limestone.	Dr. W. W. White, Bridgewater.
Dr. F. H. Jackson, Houlton.	Dr. Chas. E. Williams, Houlton.

*Secretaries will please send in corrections as the list depends on them.

CUMBERLAND COUNTY MEDICAL SOCIETY.

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|--------------------------------------|---------------------------------------|
| Dr. Egbert T. Andrews, Gray. | Dr. Edwin W. Gehring, Portland. |
| Dr. Eugene H. Andrews, Brunswick. | Dr. Frederic H. Gerrish, Portland. |
| Dr. E. G. Abbott, Portland. | Dr. Frank Y. Gilbert, Portland. |
| Dr. John H. Allen, Portland. | Dr. Arthur S. Gilson, Portland. |
| Dr. Mark Alward, Portland. | Dr. R. F. Goodhue, Deering Center. |
| Dr. C. A. Baker, Portland. | Dr. S. C. Gordon, Portland. |
| Dr. Felix Barrett, Cumberland Mills. | Dr. John E. Gray, Portland. |
| Dr. S. J. Bassford, Portland. | Dr. Leon L. Hale, Chebeague Island. |
| Dr. Joseph L. Bennett, Bridgton. | Dr. O. E. Haney, Portland. |
| Dr. J. P. Blake, Harrison. | Dr. Niels C. Hansen, Portland. |
| Dr. John W. Bowers, Portland. | Dr. Isaac D. Harper, No. Gorham. |
| Dr. Wm. H. Bradford, Portland. | Dr. Alfred W. Haskell, Portland. |
| Dr. Chas. W. Bray, Portland. | Dr. Lucinda B. Hatch, Portland. |
| Dr. Henry H. Brock, Portland. | Dr. Jane L. Hersom, Portland. |
| Dr. Frank I. Brown, So. Portland. | Dr. Louis L. Hills, Westbrook. |
| Dr. Chauncey R. Burr, Portland. | Dr. E. E. Holt, Portland. |
| Dr. Thos. J. Burrage, Portland. | Dr. E. E. Holt, Jr., Portland. |
| Dr. A. H. Burroughs, Westbrook. | Dr. J. L. Horr, Westbrook. |
| Dr. Buzzell, Standish. | Dr. C. P. Hubbard, So. Windham. |
| Dr. F. E. Carmichael, Portland. | Dr. Chas. Hutchinson, Portland |
| Dr. Chas. O. Caswell, Portland. | (Retired) |
| Dr. Dexter J. Clough, Portland. | Dr. Chas. H. Hunt, Portland. |
| Dr. James D. Clement, Portland. | Dr. Nathan D. Hyde, Freeport. |
| Dr. Thos. F. Conneen, Portland. | Dr. W. G. Jefferson, Portland. |
| Dr. Wm. L. Cousins, Portland. | Dr. Frank H. Jordan, So. Portland. |
| Dr. Chas. L. Cragin, Portland. | Dr. Irving E. Kimball, Portland. |
| Dr. C. H. Cumston, Brunswick. | Dr. Alfred King, Portland. |
| Dr. Gilman Davis, Portland. | Dr. Frank W. Lamb, Portland. |
| Dr. J. L. Davis, Portland. | Dr. A. P. Leighton, Jr., Portland. |
| Dr. Philip W. Davis, Portland. | Dr. C. M. Leighton, Portland. |
| Dr. L. A. Derry, Portland. | Dr. Harriet M. Lewis, Portland. |
| Dr. Daniel Driscoll, Portland. | Dr. W. C. Lewis, Freeport. |
| Dr. J. B. Drummond, Portland. | Dr. Philip P. Lewis, Gorham. |
| Dr. B. F. Dunn, Portland. | Dr. A. H. Little, Portland. |
| Dr. W. W. Dyson, Portland. | Dr. H. A. Lombard, Bridgton. |
| Dr. Gilbert M. Elliott, Brunswick. | Dr. Loren S. Lombard, Pleasantdale. |
| Dr. W. C. Elwell, Portland. | Dr. N. M. Marshall, Portland. |
| Dr. H. S. Emery, Portland. | Dr. Edw. J. McDonough, Portland. |
| Dr. H. J. Everett, Portland. | Dr. E. F. MacVane, Portland. |
| Dr. F. L. Ferren, Westbrook. | Dr. Alfred Mitchell, Brunswick. |
| Dr. J. P. Fickett, Naples. | Dr. Alfred Mitchell, Jr., Portland. |
| Dr. Ernest W. Files, Portland. | Dr. R. B. Moore, Portland. |
| Dr. S. E. Fisher, Portland. | Dr. Wm. Moran, Portland. |
| Dr. E. B. Folsom, Portland. | Dr. Henry M. Moulton, Cumberland Ctr. |
| Dr. C. W. P. Foss, Brunswick. | Dr. O. C. Moulton, So. Windham. |
| Dr. B. B. Foster, Portland. | Dr. W. Bean Moulton, Portland. |
| Dr. Benj. B. Foster, Portland. | Dr. Willis B. Moulton, Portland. |
| Dr. Chas. W. Foster, Woodfords. | Dr. Estes Nichols, Hebron. |
| Dr. F. H. Gardner, Portland. | Dr. Edwin M. Northcott, Portland. |
| Dr. G. I. Geer, Portland. | Dr. Jas. B. O'Neill, Portland. |

Dr. C. A. Palmer, Brunswick.	Dr. Geo. B. Swasey, Portland.
Dr. Chas. F. Parker, No. Windham.	Dr. Chas. B. Sylvester, Harrison.
Dr. H. J. Patterson, Portland.	Dr. Addison S. Thayer, Portland.
Dr. H. A. Pingree, Portland.	Dr. Augustus S. Thayer, Portland.
Dr. L. H. Poor, Webbs Mills.	Dr. Wm. W. Thombs, Yarmouthville.
Dr. Gustav A. Pudor, Portland.	Dr. S. B. Thombs, Portland.
Dr. Asa P. Reed, Naples.	Dr. Thompson, Standish.
Dr. C. H. Ridlon, Gorham.	Dr. John F. Thompson, Portland.
Dr. Ed. F. Robinson, Falmouth.	Dr. Philip P. Thompson, Portland.
Dr. W. W. Robinson, Portland.	Dr. Walter E. Tobie, Portland.
Dr. J. K. P. Rogers, Knightville.	Dr. Geo. H. Turner, Jr., Portland.
Dr. J. T. Sanborn, Portland.	Dr. H. F. Twitchell, Portland.
Dr. Frank W. Searles, Portland.	Dr. P. H. S. Vaughn, Portland.
Dr. G. H. Shedd, No. Conway, N. H.	Dr. Stanley P. Warren, Portland.
Dr. Richard D. Small, Portland.	Dr. Millard C. Webber, Portland.
Dr. John Shedd, No. Conway, N. H.	Dr. Merlin G. Webber, Portland.
Dr. Chas. D. Smith, Portland.	Dr. Fred P. Webster, Portland.
Dr. Fred M. Smith, Portland.	Dr. A. H. Weeks, Portland.
Dr. Owen P. Smith, Portland.	Dr. F. J. Welch, Portland.
Dr. Thos. P. Smith, Westbrook.	Dr. B. F. Wentworth, W. Scarboro.
Dr. E. L. Sollima, Portland.	Dr. Wm. Whitmore, Portland.
Dr. P. E. Somers, Portland.	Dr. Frank N. Whittier, Brunswick.
Dr. Jas. A. Spalding, Portland.	Dr. W. D. Williamson, Portland.
Dr. N. W. R. Straw, Portland.	Dr. A. N. Witham, Westbrook.
Dr. John I. Sturgis, New Gloucester.	Dr. Geo. M. Woodman, Westbrook.
Dr. G. L. Sturdivant, Yarmouth.	Dr. D. N. Woodman, Yarmouthville.

FRANKLIN COUNTY MEDICAL SOCIETY.

Dr. Chas. W. Bell, Strong.	Dr. E. L. Pennell, Kingfield.
Dr. W. I. Blanchard, Phillips.	Dr. J. W. Perkins, Wilton.
Dr. Elmer J. Brown, Stratton.	Dr. Geo. L. Pratt, Farmington.
Dr. F. B. Colby, Rangeley.	Dr. C. E. Proctor, Weld.
Dr. E. B. Currier, Phillips.	Dr. A. M. Ross, Rangeley.
Dr. O. B. Head, New Sharon.	Dr. W. B. Sanborn, Augusta.
Dr. A. G. Howard, Farmington.	Dr. W. J. Trefethen, Wilton.
Dr. B. F. Makepeace, Farmington.	Dr. V. O. White, East Dixfield.
Dr. J. W. Nichols, Farmington.	Dr. A. J. York, Wilton.

HANCOCK COUNTY MEDICAL SOCIETY.

Dr. R. A. Black, Sullivan.	Dr. B. L. Noyes, Stonington.
Dr. L. E. Gould, Surry.	Dr. Frank R. Ober, Northeast Harbor.
Dr. A. C. Hagerthy, Ellsworth.	Dr. J. H. Patten, Bar Harbor.
Dr. R. G. Hagerthy, Bar Harbor.	Dr. Geo. A. Phillips, Bar Harbor.
Dr. R. S. Higgins, Bar Harbor.	Dr. J. D. Phillips, Southeast Harbor.
Dr. Lewis Hodgkins, Ellsworth.	Dr. A. E. Small, Winter Harbor.
Dr. H. A. Holt, West Sullivan.	Dr. F. Fremont Smith, Bar Harbor.
Dr. O. A. Littlefield, Bluehill.	Dr. H. E. Snow, Bucksport.
Dr. E. H. McCurdy, Bluehill.	Dr. Thos. Tapley, McKinley.
Dr. C. C. Morrison, Bar Harbor.	Dr. R. W. Wakefield, Bar Harbor.
Dr. E. J. Morrison, Bar Harbor.	Dr. M. A. Wardwell, Penobscot.
Dr. Geo. A. Neal, Southwest Harbor.	Dr. H. L. D. Woodruff, Ellsworth.

KENNEBEC COUNTY MEDICAL SOCIETY.

Dr. C. W. Abbott, Waterville.	Dr. Chas. Mabry, No. Vassalboro.
Dr. H. W. Abbott, Waterville.	Dr. L. B. Mann, Augusta.
Dr. L. K. Austin, Waterville.	Dr. R. L. McKay, Augusta.
Dr. S. J. Beach, Augusta.	Dr. P. S. Merrill, Waterville.
Dr. E. W. Boyer, Waterville.	Dr. H. W. Miller, Augusta.
Dr. L. G. Bunker, Waterville.	Dr. H. A. Milliken, Hallowell.
Dr. Geo. R. Campbell, Augusta.	Dr. J. D. Nutting, Jr., Hallowell.
Dr. F. L. Chenery, Wayne.	Dr. J. E. Odiorne, E. Pittston.
Dr. Geo. A. Coombs, Augusta.	Dr. Geo. C. Parker, Winthrop.
Dr. D. B. Cragin, Waterville.	Dr. M. W. H. Pitman, Bowdoinham.
Dr. O. C. S. Daveis, Augusta.	Dr. Jas. E. Poulin, Waterville.
Dr. R. E. Donnell, Gardiner.	Dr. B. D. Ridlon, Togus.
Dr. A. A. Downs, Fairfield.	Dr. L. O. Roy, Augusta.
Dr. E. P. Fish, Waterville.	Dr. H. W. Sampson, Togus.
Dr. A. S. Fletcher, Waterville.	Dr. W. B. Sanborn, Augusta.
Dr. H. J. Frederick, Augusta.	Dr. Alton Sawyer, Gardiner.
Dr. W. P. Giddings, Gardiner.	Dr. A. A. Shaw, Clinton.
Dr. I. W. Gilbert, Litchfield.	Dr. Ralph Simons, Gardiner.
Dr. E. E. Goodrich, Waterville.	Dr. Martin Small, Weeks Mills.
Dr. Matthew Goodrich, Waterville.	Dr. F. E. Strout, Gardiner.
Dr. W. H. Harris, Augusta.	Dr. H. K. Stinson, Togus.
Dr. H. W. Hall, Augusta.	Dr. R. H. Stubbs, Augusta.
Dr. T. E. Hardy, No. Vassalboro.	Dr. Karl B. Sturgis, Augusta.
Dr. Carl J. Hedin, Augusta.	Dr. A. H. Sturdivant, Augusta.
Dr. J. F. Hill, Waterville.	Dr. F. C. Thayer, Waterville.
Dr. H. L. Horsman, Augusta.	Dr. V. S. Totman, Oakland.
Dr. Herbert L. Johnson, Augusta.	Dr. J. G. Towne, Waterville.
Dr. Wellington Johnson, Augusta.	Dr. Joseph Walsh, Augusta.
Dr. H. F. Kallock, Waterville.	Dr. Geo. Washburn, Augusta.
Dr. C. H. Leach, South China.	Dr. C. H. Witherall, Oakland.
Dr. A. B. Libby, So. Gardiner.	Dr. A. G. Young, Augusta.
Dr. C. J. Lincoln, Augusta.	

KNOX COUNTY MEDICAL SOCIETY.

Dr. Frederick B. Adams, Rockland.	Dr. M. P. Judkins, Rockland.
Dr. Eben Alden, Rockland.	Dr. Benjamin H. Kellar, Appleton.
Dr. F. O. Bartlett, Rockland.	Dr. W. F. Lyford, Vinalhaven.
Dr. Geo. H. Coombs, Waldoboro.	Dr. Chas. D. North, Tenants Harbor.
Dr. A. W. Foss, Rockland.	Dr. M. J. O'Connor, Rockland.
Dr. H. W. Frohock, So. Thomaston.	Dr. E. B. Silsby, Rockland.
Dr. I. B. Gage, Warren.	Dr. W. M. Spear, Rockland.
Dr. J. L. Gammon, Vinalhaven.	Dr. J. M. Wakefield, Warren.
Dr. H. E. Gribben, Rockland.	Dr. Edwin J. Walker, Thomaston.
Dr. L. W. Hadley, Union.	Dr. S. Y. Weidman, Rockport.
Dr. W. F. Hart, Camden.	Dr. A. Woodside, Rockland.
Dr. B. D. L. Huse, Camden.	

OXFORD COUNTY MEDICAL SOCIETY.

Dr. Geo. A. Allen, Lovell.	Dr. Walter Merrill, So. Paris.
Dr. Frank N. Barker, Norway.	Dr. F. W. Morse, Canton.
Dr. H. L. Bartlett, Norway.	Dr. Laura F. Noyes, Rumford Falls.
Dr. H. J. Binford, Mexico.	Dr. L. M. Pastor, Rumford.
Dr. B. F. Bradbury, Norway.	Dr. W. M. Pease, Dixfield.
Dr. J. J. Cobb, Berlin, N. H.	Dr. C. B. Rankin, Mechanic Falls.
Dr. H. R. Farris, Oxford.	Dr. A. L. Stanwood, Rumford Falls.
Dr. J. G. Gehring, Bethel.	Dr. D. M. Stewart, So. Paris.
Dr. J. B. Greene, Rumford.	Dr. A. J. Stimpson, Waterford.
Dr. Wm. B. Haskell, Oxford.	Dr. Jas. S. Sturdivant, Dixfield.
Dr. G. H. Hutchins, Mechanic Falls.	Dr. R. R. Tibbets, Bethel.
Dr. Frank E. Leslie, Andover.	Dr. L. H. Trufant, Norway.
Dr. J. G. Littlefield, So. Paris.	Dr. F. E. Wheeler, W. Paris.
Dr. Arthur J. Lougee, Fryeburg.	Dr. F. E. Wheel, Rumford Falls.
Dr. L. B. Marcow, Berlin, N. H.	Dr. V. O. White, E. Dixfield.
Dr. E. M. McCarty, Rumford Falls.	Dr. I. H. Wight, Bethel.

PENOBSCOT COUNTY MEDICAL SOCIETY.

Dr. George W. Alexander, Orono.	Dr. L. S. Mason, Bangor.
Dr. Willard A. Bates, Enfield.	Dr. W. P. McNally, Bangor.
Dr. C. H. Bayard, Orono.	Dr. H. S. Milliken, Bangor.
Dr. O. J. Bemis, Bangor.	Dr. Jos. H. Murphy, Dexter.
Dr. J. E. Brooks, Bangor.	Dr. W. H. Nason, Hampden.
Dr. E. E. Brown, Bangor.	Dr. Wm. C. Peters, Bangor.
Dr. B. L. Bryant, Bangor.	Dr. S. W. Redman, Exeter.
Dr. Chas. S. Bryant, Millinocket.	Dr. D. A. Robinson, Bangor.
Dr. W. A. Bumps, Dexter.	Dr. Lewis Robinson, Carmel.
Dr. David Bunker, Bangor.	Dr. James P. Russell, So. Brewer.
Dr. Chas. H. Burgess, Bangor.	Dr. J. W. Sawyer, Dexter.
Dr. H. M. Chapman, Bangor.	Dr. Wm. H. Simmons, Bangor.
Dr. H. T. Clough, Bangor.	Dr. A. K. P. Smith, Corinna.
Dr. T. V. Coe, Bangor.	Dr. H. E. Snow, Bucksport.
Dr. H. H. Crane, Bangor.	Dr. J. F. Starrett, Bangor.
Dr. P. H. Elkins, Old Town.	Dr. Thos. M. Calvin, Brewer.
Dr. Wm. Ellingwood, Winterport.	Dr. C. P. Thomas, Brewer.
Dr. O. R. Emerson, Newport.	Dr. Herbert E. Thompson, Bangor.
Dr. Elmer J. Farnham, Patten.	Dr. John B. Thompson, Bangor.
Dr. T. J. Fitz-Morris, Bangor.	Dr. Geo. B. Tibbetts, Orrington.
Dr. Leonard H. Ford, E. Eddington.	Dr. Edw. Tomlinson, Orono.
Dr. Leo F. Hall, Wynn.	Dr. Asa W. Twitchell, Old Town.
Dr. Daniel Hennessy, Bangor.	Dr. F. C. Tyson, Bangor.
Dr. F. H. Hills, Bangor.	Dr. R. D. Walton, Frankfort.
Dr. W. L. Hunt, Bangor.	Dr. Percy Warren, Bangor.
Dr. Henry A. King, Bangor.	Dr. Geo. F. Way, Jr., Lincoln.
Dr. J. A. Lethiecq, Brewer.	Dr. F. D. Weymouth, Charleston.
Dr. R. J. Love, Danforth.	Dr. L. H. Wheeler, So. Brewer.
Dr. Martin C. Madden, Old Town.	Dr. W. E. Whitney, Bangor.
Dr. Daniel McCann, Bangor.	Dr. Galen Woodcock, Bangor.
Dr. Blanche Mansfield, Bangor.	Dr. J. B. Woods, Bangor.
Dr. E. M. Marquis, Old Town.	Dr. L. S. Wright, Harmony.
Dr. Wm. C. Mason, Bangor.	

PISCATAQUIS COUNTY MEDICAL SOCIETY.

Dr. A. A. Brown, Monson.	Dr. Hiram Hunt, Greenville.
Dr. M. O. Brown, Foxcroft.	Dr. Ralph H. Marsh, Guilford.
Dr. R. Cox, Kineo.	Dr. T. H. McDonough, Brownville.
Dr. N. H. Crosby, Milo.	Dr. E. D. Merrill, Foxcroft.
Dr. E. F. Flint, Foxcroft.	Dr. J. L. Potter, Guilford.
Dr. C. C. Hall, Dover.	Dr. Fred J. Pritham, Greenville Junct.
Dr. C. C. Hall, Jr., Foxcroft.	Dr. C. W. Ray, Sangerville.
Dr. D. L. Harden, Brownville.	Dr. H. A. Snow, Milo.
Dr. W. R. J. Hathaway, Milo.	Dr. A. H. Stanhope, Dover.
Dr. D. W. Hayes, Brownville.	Dr. E. A. Thompson, Dover.

SAGADAHOC COUNTY MEDICAL SOCIETY.

Dr. Byron Barker, Bath.	Dr. E. J. Marston, Bath.
Dr. H. O. Curtis, Topsham.	Dr. F. B. Peabody, Richmond.
Dr. R. H. Donnell, Bath.	Dr. C. A. Peaslee, Bath.
Dr. H. Fox, Bath.	Dr. M. W. H. Pitman, Bowdoinham.
Dr. Edwin Fuller, Jr., Bath.	Dr. Wallace N. Price, Richmond.
Dr. Edwin Fuller, Bath.	Dr. W. E. Rice, Bath.
Dr. Geo. A. Gregory, Boothbay.	Dr. L. T. Snipe, Bath.
Dr. Robert E. Hannigan, Bath.	Dr. A. A. Stott, Bath.
Dr. I. C. Irish, Bowdoinham.	Dr. A. F. Williams, Phippsburg.
Dr. Jos. O. Lincoln, Bath.	

SOMERSET COUNTY MEDICAL SOCIETY.

Dr. J. D. Ames, Norridgewock.	Dr. E. P. Pratt, N. New Portland.
Dr. L. H. Blanchard, Hartland.	Dr. F. J. Robinson, Fairfield.
Dr. L. Brown, Norridgewock.	Dr. W. G. Sawyer, Madison.
Dr. O. J. Caza, Skowhegan.	Dr. H. W. Smith, Norridgewock.
Dr. L. A. Dascomb, Skowhegan.	Dr. H. Stevens, Skowhegan.
Dr. A. A. Downs, Fairfield.	Dr. W. S. Stinchfield, Skowhegan.
Dr. F. E. Earle, Canaan.	Dr. H. C. Taggart, Skowhegan.
Dr. S. F. Greene, Solon.	Dr. T. P. Tash, Fairfield.
Dr. J. N. Merrill, Skowhegan.	Dr. F. L. Tozier, Fairfield.
Dr. F. S. Merrow, Norridgewock.	Dr. J. E. Wadsworth, Skowhegan.
Dr. W. S. Milliken, Madison.	Dr. J. H. Wilson, Cambridge.
Dr. C. A. Moulton, Hartland.	Dr. E. M. Wing, No. Anson.
Dr. E. A. Proctor, Pittsfield.	

WALDO COUNTY MEDICAL SOCIETY.

Dr. N. R. Cook, Brooks.	Dr. A. M. Small, Freedom.
Dr. Wm. Ellingwood, Winterport.	Dr. E. Small, Belfast.
Dr. C. R. Hines, Searsport.	Dr. E. L. Stevens, Belfast.
Dr. C. B. Hoyt, Liberty.	Dr. H. L. Truworth Unity.
Dr. B. P. Hurd, Thorndike.	Dr. O. S. Vickery, Belfast.
Dr. S. W. Johnson, Belfast.	Dr. R. D. Walton, Frankfort.
Dr. A. E. Kilgore, Brooks.	Dr. C. M. Whitney, Unity.
Dr. G. C. Kilgore, Belfast.	Dr. E. A. Wilson, Belfast.
Dr. Adelbert Millett, Belfast.	

WASHINGTON COUNTY MEDICAL SOCIETY.

Dr. N. B. T. Barker, Woodland.	Dr. C. E. Johnson, Princeton.
Dr. E. H. Bennett, Lubec.	Dr. A. E. Logie, Millbridge.
Dr. H. C. Best, Pembroke.	Dr. J. W. Longfellow, Machias.
Dr. W. C. Crain, Princeton.	Dr. W. N. Miner, Calais.
Dr. E. A. Cranston, Calais.	Dr. J. P. Russell, Robbinston.
Dr. W. G. Gilbert, Calais.	Dr. J. W. Snell, Dennysville.
Dr. Eliza Grady, Eastport.	Dr. E. V. Sullivan, St. Stephen, N. B.
Dr. A. R. Harmon, Lubec.	Dr. Ruth Tustin, Eastport.
Dr. W. Everett Gray, Milltown.	Dr. J. A. Walling, Millbridge.
Dr. R. A. Holland, Calais.	Dr. Stephen E. Webber, Calais.
Dr. Samuel B. Hunter, Machias.	Dr. E. A. White, Columbia Falls.

YORK COUNTY MEDICAL SOCIETY.

Dr. Percy H. Abbott, Goodwin's Mills.	Dr. J. O. McCorrison, No. Berwick.
Dr. L. M. Black, Saco.	Dr. B. M. Moulton, Springvale.
Dr. C. W. Blagdon, Sanford.	Dr. E. D. O'Neil, Biddeford.
Dr. E. L. Burnham, Sanford.	Dr. J. M. O'Connor, Biddeford.
Dr. L. W. Carpenter, Limerick.	Dr. Chas. W. Pillsbury, Saco.
Dr. J. D. Carty, Kittery Point.	Dr. L. L. Powell, Saco.
Dr. J. O. Chenevert, Biddeford.	Dr. H. L. Prescott, Kennebunkport.
Dr. J. D. Cochrane, Saco.	Dr. G. C. Precourt, Biddeford.
Dr. Edwin P. Cook, York Village.	Dr. H. H. Purington, Kennebunk.
Dr. D. E. Dolloff, Biddeford.	Dr. Jesse A. Randall, Old Orchard.
Dr. W. T. Elliott, Berwick.	Dr. F. A. Ross, So. Berwick.
Dr. C. J. Emery, Biddeford.	Dr. E. E. Shapleigh, Kittery.
Dr. M. H. Ferguson, Biddeford.	Dr. Samuel G. Sawyer, Cornish.
Dr. John S. Fogg, Biddeford.	Dr. J. H. Shanno, Saco.
Dr. C. P. Gerrish, So. Berwick.	Dr. Fitz E. Small, Biddeford.
Dr. L. A. Girard, Biddeford.	Dr. F. W. Smith, York Village.
Dr. R. S. Gore, Sanford.	Dr. W. N. Smith, Ogunquit.
Dr. Paul G. Hill, Biddeford.	Dr. C. E. Thompson, Saco.
Dr. Frank H. Hobbs, So. Waterboro.	Dr. Chas. F. Traynor, Biddeford.
Dr. H. Willis Hurd, Biddeford.	Dr. B. F. Wentworth, Scarborough.
Dr. E. D. Jacques, So. Berwick.	Dr. H. A. Weymouth, Saco.
Dr. A. L. Jones, Old Orchard.	Dr. Arthur G. Wiley, Bar Mills.
Dr. C. F. Kendall, Biddeford.	Dr. L. E. Willard, Saco.
Dr. J. R. La Rochelle, Biddeford.	Dr. J. L. M. Willis, Eliot.
Dr. A. C. Maynard, Biddeford.	

SURGICAL SUGGESTIONS.

Active hemorrhage from a gastric ulcer is rarely fatal; the weight of evidence indicates that it is better to operate after than during the bleeding. Active hemorrhage from a duodenal ulcer is often fatal; operate as soon as the diagnosis is made. — *American Journal of Surgery*.

Gastro-enterostomy should not be performed unless there is, or is deliberately made, an obstruction in the duodenum or at the pylorus. If these remain, or become, patent the food will not be diverted through the artificial channel. — *American Journal of Surgery*.

Necrology.

ERNEST CLARE MCGOULDRIK.

Dr. McGouldrick, one of those attractive personalities whom everybody feels proud of knowing as a friend and acquaintance, was born in Machias, Maine, August 30, 1876, and died in his native town, January 9, 1912, after several months of suffering from a valvular disease of the heart. He was educated in the common schools of Machias, then at Phillips-Andover Academy, was graduated with high honors at Yale in the Class of 1900, and afterwards studied several years at Johns Hopkins in Baltimore. After graduating in medicine he was an interne and pathologist at Barnes Hospital.

By this time, he was fully equipped to practice medicine and surgery according to modern laboratory and hospital methods. It is doubtful if for a long time, we have had a physician in our Association so well fitted for practice, or who ever developed such extraordinary talent along his chosen lines of medicine. He settled in Brewer, Maine, in 1909, was soon elected City Physician and later on, unanimously chosen one of the staff of the Eastern Maine General Hospital in Bangor. He was also an interested member of the Penobscot county medical society and of our own association.

The unusual keenness for medical work which Dr. McGouldrick at once developed soon caused cardiac disturbances, and yet all the more he made indomitable efforts to keep his practice moving in Brewer and his hospital work in Bangor across the river. But time soon told him plainly that his efforts were in vain, that he was passing along, that rest might prolong his life, but that if he persisted in his work he was doomed. Hoping to recover strength for moderate work, he went home to Machias, but after constant suffering passed beyond our knowledge. As a man and as a physician, it is a pity that he should be missing from our band of workers. Regret, grief and poignant sorrow associate themselves with our remembrance of McGouldrick.

J. A. S.

MARTIN COFFIN.

Dr. Martin Coffin of Bar Mills, as his last place of practice, was born in Waterboro, Maine, January 4, 1838, educated there in the common schools, and coming to Portland at about the age of eighteen was a clerk in the apothecary shop of Dana & Knights, where he early learned the elements of therapeutics and obtained great skill in the compounding of drugs. He then studied medicine at the Portland School for Medical Instruction, at the Dartmouth College Medical School and finally at the Long Island Hospital Medical School, where he graduated in 1875, at that time being about thirty-seven years of age. He settled first at Nason's Corner in Deering, then in succession at Steep Falls and Standish, and finally at Bar Mills, where he practiced twenty years or more.

From this town, as a center, he practiced as a general country physician over a large extent of country and had much to do and did it in a plain, simple fashion with good diagnostic powers and an unusual knowledge of the action and results of drugs obtained by his early education in Portland.

I knew Dr. Coffin very well indeed, and saw much of him. For years, he brought me many patients, and I invariably found his knowledge of the cases which he brought to me, remarkable in a country practitioner. He thought he was right, but liked to be assured that he was doing all that could be done for his patients. He married, November 27, 1862, Miss Harriet L. Starbird of Westbrook and was survived by her and by a son who did not follow medicine.

Dr. Coffin died December 23, 1907, but as I have never seen any notice taken of his death, it seems proper here to insert a brief word concerning a kind friend and a sturdy and able practitioner of medicine.

J. A. S.

NOTICES.

ARMY MEDICAL CORPS EXAMINATIONS.

The surgeon general of the army announces that preliminary examinations for the appointments of first lieutenants in the Army Medical Corps will be held on July 15, 1912, and September 3, 1912, at points to be hereafter designated.

Full information concerning these examinations can be procured upon application to the "Surgeon General, U. S. Army, Washington, D. C." The essential requirements to securing an invitation are that the applicant shall be a citizen of the United States, shall be between twenty-two and thirty years of age, a graduate of a medical school legally authorized to confer the degree of doctor of medicine, shall be of good moral character and habits, and shall have had at least one year's hospital training, after graduation. The examinations will be held concurrently throughout the country at points where boards can be convened. Due consideration will be given to localities from which applications are received, in order to lessen the traveling expenses of applicants as much as possible.

The examination in subjects of general education (mathematics, geography, history, general literature, and Latin) may be omitted in the case of applicants holding diplomas from reputable literary or scientific colleges, normal schools or high schools, or graduates of medical schools which require an entrance examination satisfactory to the faculty of the Army Medical School.

In order to perfect all necessary arrangements for the examination, applications must be complete and in possession of the Adjutant General at least three weeks before the date of examination. Early attention is therefore enjoined upon all intending applicants. There are at present sixty-eight vacancies in the Medical Corps of the Army.

MEDICAL INTERNE.

The United States Civil Service Commission announces an examination on June 5, 1912, at the places mentioned in the list printed hereon, to secure eligibles from which to make certification to fill two or more vacancies in the position of medical interne, Government Hospital for the Insane, Washington, D. C., at \$600 per annum, with maintenance, and vacancies requiring similar qualifications as they may occur in that hospital, unless it is found to be in the interest of the service to fill such vacancies by reinstatement, transfer, or promotion.

Applicants should at once apply to the United States Civil Service Commission, Washington, D. C.

SURGICAL SUGGESTIONS.

A ligature should not be placed on the carotid too near the bifurcation lest the cloth which forms shall not have sufficient surface to which to adhere and become detached and swept to the brain.—*American Journal of Surgery.*

If the surgeon desires to discover carcinoma of the cervix in a curable stage women past middle life must be examined periodically, for to wait until symptoms appear is often to discover the disease too late.—*American Journal of Surgery.*

JOURNAL OF MAINE MEDICAL ASSOCIATION

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Editorial Comment.

Our Journal.

The Journal of the Maine Medical Association is just completing its second year of existence. The Editorial Staff have done their best to make it of value to the profession of our State and fully appreciate the co-operation of all those who have aided in the work. Up to two years ago, the papers and transactions were printed in a book form and sent to the members. The Journal has accomplished this work and in addition, it has printed valuable papers read before the County Societies. It has endeavored to treat, editorially, advanced ideas and to review current medical literature.

Every effort has been made to secure personal news and notes and, in fact, all matters of interest to the medical profession.

In addition to the above, the Journal has made possible the taking over of the Maine Academy Library and placing it on a solid foundation. It has also made possible the work submitted in the so-called "Committee Report."

It has been in a position to aid some few of the County Societies in arranging their programmes for their meetings, in that the list of papers submitted for publication in the Journal are accessible to the various secretaries while the authors are, as a rule, very glad to re-read them if desired. Finally, it pleases us to state that it will finish its second year without a deficit.

State Meeting.

Arrangements are nearly complete for the June session and the members will find ample opportunity and material to keep them going. There will be a meeting of the Maine Eye and Ear Association at the Portland Country Club, on the evening before the general session and a copy of the programme will be sent to any member of the State Association, on request.

Both mornings will be given over to clinics, from 8 to 11 o'clock, while the general sessions will begin promptly at 11 A. M. and 2 P. M. The evening of the first day will be given over to the annual banquet and the second evening, the members will be guests of the Cumberland County Medical Society for a sail around Casco Bay, followed by a "clam bake."

On the afternoon of the first day, there will be a ladies' reception from 4 to 6 P. M., at the Lafayette Hotel.

No comment is necessary in behalf of the papers and essayists.

Every effort will be made to entertain the visiting members, so be sure and come.

Committee Report.

A copy of the resolution embodied in the "Committee Report" has been sent to every member of the State Association, while all but two counties have unanimously adopted the resolutions.

The recommendations will come before the State Association, for final action, on the afternoon of the second day.

It must be borne in mind that while these various matters may be of little value to a single individual, it is aimed to improve conditions within the profession. It is necessary to recognize, that conditions are growing progressively worse under present conditions, to stimulate the profession into activity.

The first step necessary is to become more thoroughly organized and equalize conditions. In County Associations, the most common reasons given for not belonging, is the lack of value of membership to those living some distance from the place of meeting. It can readily be seen that the members located at the place of meeting can reap the benefit. If this year, the profession can take steps towards controlling the abuse of our charities, and offer legal advice in defense to all members of our association, two most valuable steps will be taken.

The Medical Defense plan will increase, to a very slight degree, the dues of city physicians and surgeons who will still carry protective

insurance, while those in country practice will find the defense fund sufficient, so that, the unequal advantage offered by the place of meetings will be to a slight degree offset by the extra tax. Moreover, the city physician will be called on more frequently to serve in the capacity of an expert in cases where a brother physician is involved in a suit, so that in the end, matters will be nearly equalized and a definite value can be fixed on membership to the county and State association. As a matter of fact, one can not afford to be outside.

The question of medical defense is most important and should receive careful consideration.

The Library of the Maine Medical Association.

At the 1911 meeting of the Maine Medical Association a small fund was voted towards the maintenance of a Medical Library at Portland. By the kindness of the Trustees of the Eye and Ear Infirmary, acting through Dr. E. E. Holt, there was placed at the service of the association a splendid room, well fitted with shelves and book racks. Also, through the courtesy of Dr. Holt, the books comprising the library of the Maine Academy of Medicine and Science were presented to us.

During the past year, these books have been arranged and catalogued and as new books have been sent to the Maine Medical Journal, they have been added to the library so that it is kept well up to date. In addition, there are received each month and kept on file at the library, about fifty of the current Medical Journals, together with government reports and other pamphlets of medical interest.

A temporary librarian has been appointed and Miss Eileen Moore has immediate charge of the library and will be there at regular hours on week days. Altogether, it seems to us that now the Maine Medical Association has a library that it need not be ashamed of and we hope that when any of the members are in Portland, they will stop in at the Eye and Ear Infirmary and make use of the opportunities that it affords. Please remember that the library belongs to each and every member and any book that we have will be sent on request.

SURGICAL SUGGESTIONS.

In injuries to the cord, if the tendon reflexes are preserved, even slightly, the surgeon may exclude complete and irremediable severance of the cord; but the total loss of these reflexes during the first few days is not conclusive, as the loss may be transitory.—*American Journal of Surgery.*

County News.

CUMBERLAND.

THE PORTLAND MEDICAL CLUB.

The fifth meeting of the Portland Medical Club was held at the Columbia Hotel, Thursday evening, May 2nd. There were seventeen members present.

President Driscoll appointed as a Committee for the Annual Outing Drs. E. E. Holt, Jr., J. B. Drummond, M. C. Webber.

The paper of the evening was by Dr. H. A. Pingree, entitled "Some Incidents in the Life of Ambroise Pare," which was a most interesting discussion of the 16th century practice and conditions, enriched by excerpts from Pare's writings and elicited much favorable comment. Cases were reported by Drs. Haney, Warren and Weeks.

HAROLD J. EVERETT,
Secretary.

WESTBROOK MEDICAL CLUB.

The Westbrook Medical Club held its regular meeting at the home of Dr. Felix Barrett. The paper of the evening was delivered by Dr. Charles O. Haynes of Gorham. Dr. Haynes being a retired Army Surgeon, gave us many reminiscences of his experience in the Army during the War. This was the last meeting of the Club before its summer vacation.

F. L. FERREN, *Secretary.*

AROSTOOK.

The Aroostook Medical Society will hold its annual meeting at Crescent Park, Houlton, on Tuesday the 4th day of June. Dr. S. P. Warren, Dr. E. B. Sanger and Dr. R. H. Marsh of Guilford are expected to be with us.

The membership is larger than it ever has been and there will be several join at this meeting.

The Houlton meeting is always enjoyable, as well as a very profitable convention.

W. G. CHAMBERLAIN,
Secretary.

KENNEBEC.

AUGUSTA MEDICAL CLUB.

The Augusta Medical Club was entertained by Dr. H. W. Hall at the Maine Insane Hospital, Monday evening, May 13th. Dr. C. J. Lincoln read an instructive paper on the "Toxemia of Pregnancy." Twelve members were present.

H. W. MILLER,
Secretary.

PENOBSCOT.

The monthly meeting of the Penobscot County Medical Society was held at the Bangor House, Tuesday, May 21st.

Dr. F. H. Jackson of Houlton, read a paper on "Cancer."

Business meeting at 7.30. Supper at 8.

JOHN B. THOMPSON, *Secretary*.

WASHINGTON.

The regular meeting of the Washington County Medical Society was held in the City Rooms, Eastport, Thursday, May 9th.

Papers were read as follows:

Dr. R. W. Wakefield, Bar Harbor, "A Study of Eclampsia and Toxæmia of Pregnancy."

Dr. C. G. Main, St. Stephen, N. B., "Case Reports."

Dr. J. R. C. Byron, Eastport, "Treatment of Puerperal Eclampsia."

Dr. M. L. Young, Oak Bay, N. B., "The Necessity for Correction of Flat-Foot."

Dr. W. N. Miner, Calais, "Misapprehension of a General Practitioner."

Dr. W. E. Gray, Milltown, N. B., "Notes upon the Life and Works of Lord Lister."

H. B. MASON,
Secretary.

YORK.

YORK COUNTY MEDICAL SOCIETY.

The next quarterly meeting of the York County Medical Society will be held this month (June), probably on the 27th. The third quarterly meeting, which has been known as "Midsummer meeting" and "Ladies' Day," has been one devoted to an outing at some pleasure resort in this vicinity, and ladies related to the members of the Society have been invited to attend.

It is quite likely that Biddeford Pool will be selected as the place for this session. It is one of the most delightful summer resorts along the Maine coast. The records of the Secretary of this Society show that our first meeting was held at the "Pool," July 11, 1895, and no meeting has been held there since that date, due to the fact, probably that there are so many attractive places in York County that it requires many years to visit all of them.

We are gradually increasing our membership, and it is to be hoped that many more physicians in this County, not members at present, will be enrolled during the next year or two. It would seem as if every progressive physician of good reputation should desire to obtain the manifold benefits and opportunities which come from membership in this County and State Association.

It is to be hoped that the annual meeting of the Maine Medical Association will be a great success in every respect, and let us all make a special effort to be present and increase the large number who will attend from every county.

ARTHUR L. JONES,
Secretary.

Book Reviews.

A Compend of Genito-Urinary Diseases and Syphilis, Including Their Surgery and Treatment.

By Robert H. Greene, M. D., Professor of Genito-Urinary Surgery at the Fordham University, New York; and Harlow Brooks, M. D., Assistant Professor of Clinical Medicine, University and Bellevue Medical College. Third Revised Edition. Octavo of 639 pages, 339 illustrations. Philadelphia and London, W. B. Saunders Company, 1912. Cloth, \$5.00 net; half morocco, \$6.50 net.

This is the third edition of a work which certainly should appeal to the general practitioner. It gives a clear cut presentation of Genito-Urinary diseases. The newer methods of diagnosis in kidney disease, such as the "Phenol Sulphone-phthelein test," have evidently been carefully investigated by the authors and the discussion presented is so much the more valuable.

The treatment is especially well discussed and it is refreshing to find in handling urethritis that the many shot-gun prescriptions for internal medication have been omitted. Surgical procedures are carefully discussed and well illustrated.

P. P. T.

Diseases of the Genito-Urinary Organs and Kidney.

By Charles S. Hirsch, M. D. Second Edition with 74 illustrations. Philadelphia, P. Blakiston's Son & Co., 1012 Walnut St., 1912.

This work, although listed as a quiz-compend, for a book of this description is unusually thorough in its treatment of the subjects included.

It has been recently revised and additions made and contains practically all recent advances of importance in this department of surgery in the way of diagnosis and treatment.

While such a book cannot be recommended to the exclusion of a more extensive work, yet it will be found to be of great assistance to the student in preparing for examinations and is sufficiently complete to make a valuable book of reference to the busy general practitioner, who desires to acquaint himself with recent progress in genito-urinary diseases and syphilis, as it furnishes reliable information in a compact form.

A. M., J.R.

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Abstracts of Current Literature.

UNDER THE CHARGE OF THE MEDICAL REVIEW CLUB
OF PORTLAND.

(Editorial from British Medical Journal, January 6, 1912.)

Experimental Therapy of Cancer.

The article deals with the recent important work of Prof. Wasserman, Dr. Keysser and Dr. Michael Wasserman, which was reported to the Medical Society of Berlin. These men, encouraged by Ehrlich's success in finding a drug which destroyed the spirochetæ pallidæ without injuring the host, have been endeavoring to find a chemical substance sufficiently selective in action to destroy the cells of a new growth, without endangering the life of the animal. They used mice with spontaneous or inoculated cancer or sarcoma for their experiments. This is not a hopeless search, for the selective affinity of certain chemicals to definite tissues is striking, to this is due the fact that morphine is an opiate, working chiefly on the central nervous system, that adrenalin chloride raises the blood pressure, etc. Working upon this theory, Ehrlich introduced arsenic into various organic compounds until he found one which destroyed the germ of syphilis without injuring the normal tissues.

Believing that the tissues of new growths vary from that of normal tissues enough to allow this selective action to be manifested the authors started their work.

The salts of selenic and telluric acids which are highly poisonous were considered first. These were injected directly into the tumors of mice with the destruction of the growths. But when injected into the circulation to enable them to reach internal tumors, the poison killed the mice. In mild doses, they had no effect on the growths, that is they showed no selective action, therefore the investigators combined selenium with eosin—some hundreds of different combinations being used until one was found which exerted a specific destructive action on the cells of the growths, after three injections of this compound the growths became softer and after six or eight injections were entirely absorbed and in the several months since their disappearance have not again appeared. The authors with this combination, caused the absorption of several hundreds of tumors, with but one or two deaths of the mice in all cases in which the tumors were not larger than a certain definite ratio to the body weight of the mice.

The authors point out that there is no reason to believe that the precise means which they found effective in mice will be successful in men, but they believe that further work will ultimately lead to the discovery of a useful treatment for malignant disease.

J. B. DRUMMOND.

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Maine Medical Association

Program of the Portland Session, at the City Hall,

WEDNESDAY, JUNE 12, 1912.

*CLINICS, 8 to 11.

Morning Session, 11.00

Certain Aspects of Arterio-sclerosis —

T. J. Burrage

Abstract. Present Conceptions of Etiology and Pathology. Experimental Evidence. Juvenile Arterial Degeneration. Blood Pressure findings. Cerebral Arteriosclerosis. Angina Abdominalis. Intermittent Limping. Treatment.

Discussion opened by Edwin Gehring.

"Malformation in development of Superior Maxillary Bone." S. J. Beach, Augusta

Afternoon Session, 2.00

President's Address —

Stanley P. Warren, Portland

"General Paralysis" (Symposium)

Pathology —

Henry W. Miller

Abstract. Lantern Slide Illustrations of the Pathological Changes in General Paralysis.

Symptomatology —

Carl Herdin

Abstract. Early symptoms of General Paralysis. The typical mental and physical symptoms in the developed stage of the disease. The characteristic mental symptoms of the clinical types, with a report of illustrative cases.

Etiology and Early Diagnosis —

Frederick L. Hills

Abstract. Paresis a wide spread disease and is apparently occurring with increasing frequency. Age at onset and causative factors in 100 cases admitted to the Eastern Maine Insane Hospital. Prominence of syphilis in the etiology, alone or combined with alcoholism. Mental and physical stress as a possible factor.

Importance of the early recognition of the disease. Danger from paretics occupying positions of trust. Mode of onset. Often diagnosed as neurasthenia. Importance of careful examination for pupillary and reflex disturbances in these cases. Early somatic and mental symptoms. Differential diagnosis. Importance of examination of cerebro-spinal fluid as a diagnostic aid in suspected cases.

Laboratory Aids in Diagnosis —

Herbert E. Thompson

Abstract. The aim of the laboratory worker is to find reactions which are specific. Unfortunately, there are few such reactions. The Widal reaction for typhoid probably is the nearest of any to the ideal. In the diagnosis of General Paralysis, we have no reaction which is specific of the disease. There are however, several tests which are applied in order to complete the evidence necessary for diagnosis.

*Clinics. Maine General Hospital, Maine Eye and Ear Infirmary, Childrens Hospital. Will be held daily, 8 to 11. For list of operations for Wednesday, A. M., telephone the above institutions. The operations for the second day will be listed at the place of meeting.

Syphilis has always been considered the most important etiological factor in general paralysis; consequently, the Wasserman reaction finds an important place. The Wasserman has been applied to the cerebro-spinal fluid as well as the blood serum. There are several tests commonly applied to the cerebro-spinal fluid. The most important is probably the cytological examination. Cases of general paralysis almost invariably show an increased cell count. The Nogouchi butyric acid method is very convenient. An increased globulin content is a very constant factor.

Discussions opened by S. C. Gordon and A. S. Thayer.

"Annual Oration" —

"The Present Status of Modern Obstetrics" — Prof. Edwin B. Cragin, New York

RECEPTION

7.00 P. M. Falmouth Hotel.

ANNUAL BANQUET

7.30 P. M. Falmouth Hotel.

Morning Session, 11.00

"Chronic Lead Poisoning from Drinking Water" —

D. M. Stewart, S. Paris

Abstract. Acute lead poisoning, an old and thoroughly understood affliction. Chronic lead poisoning also an old trouble, but never thoroughly investigated, not commonly understood and often not recognized.

Distinction between acute and chronic type. Chronic form more common in hilly countries and from private water supplies. Water always more or less contaminated when in contact with lead for a long time.

Lead a substance foreign to the system and always undesirable. Lead poisoning a definite trouble comparatively easy to diagnose and satisfactory to treat. Chronic cases when sufficiently progressed, take on acute symptoms. Great difference in susceptibility. Children not so susceptible as adults. Females more susceptible than males. Prognosis depends on stage of discovery and treatment. Symptoms: various, changeable and obscure. Report of clinical cases.

Discussion opened by F. E. Wheeler, West Paris.

"Cancer" —

Donald Cragin, Waterville

"Smallpox, a few observations" —

E. T. Flint, Foxcroft

Abstract. Short introductory giving date of introduction into this country. Type of disease seen in New England, modification with general symptoms, complication, treatment. Variety of contagion, cases cited. Vaccination, reaction of tissue to show whether there will be a 'take' or not. Vaccination and smallpox co-existent. Vaccination of syphilitic and gonorrhoea patients. Women in various stages, pregnancy,

young children. Place to vaccinate. Immunity conferred in utero; two short cases cited. Handling quarantine under usual conditions in rural communities and lumber camps. Disinfecting apartments and clothing, method of securing a clean change of clothing in one room, houses and camps. Way in which disease is spread with citation of coal miner coming from Nova Scotia; and passing through Portland, Waterville and Bangor to Aroostook where quarantined. History of the case with photographs.

Afternoon Session, 2.00.

"Insanity and Heredity" —

J. B. MacDonald, Concord, N. H.

Abstract. Insanity not an independent disease entirely; relation to feeble-minded and other degenerative states. Investigations seem to prove functional insanities, feeble-mindedness, etc., are branches of one family tree. — defect.

Theories of the Eugenists based on Weismann's law. Inheritance depends upon certain determiners in the germ cells. Eugenic investigations show we cannot, by best methods of training and education or treatment, make a poor stock with mental abnormalities a good one. Increase of insanity partly due to the fostering care extended to, and the large liberty allowed, persons of neuropathic make-up. Twenty to twenty-five per cent of all admissions to State Hospitals are cases of re-admission. Large percentage of discharges are cases of non-recovery. Possibility of propagation of defective protoplasm from this class of defect transmitting persons.

Necessity for prevention of propagation of the "Unfit." Two ways of precaution: permanent segregation and unsexing. Adequate and intelligent legislation to this end depends upon intelligent understanding of conditions by the public.

"Obstetrics" —

P. W. Davis

Election of officers.

Report of Council.

Report of House of Delegates.

Action of "Committee Report."

SAIL AND CLAM BAKE.

At the close of the afternoon session the mem-

bers' will be entertained as guests of the Cumberland County Medical Society, by a sail down the bay, followed by a clam bake at Long Island.

LADIES' RECEPTION.

Wednesday, June 12, 4 to 6 P. M., Lafayette Hotel.

The visiting ladies in attendance at the State Association will receive an invitation to the ladies' reception, to be held at the Lafayette Hotel, Wednesday, from four to six. It is hoped that the privileges of the Portland Country Club will be extended to them during the two days' stay and every effort is being made towards giving them a pleasant time.

HOUSE OF DELEGATES.

Will meet at 9 A. M., at the City Hall, on Wednesday, June 12th, and at other times as may be necessary, subject to call of President.

THE COUNCIL.

Will meet at the close of meetings of the House of Delegates and at such other time as may be necessary.

CHAPTER 1. MEMBERSHIP.

"Sec. 2. Any active member of the Association whose dues are in arrears more than one year, shall forfeit his membership in the Association and may be re-instated only by becoming an active member of some component country society."

"Any member, who is under sentence of suspension or expulsion, or whose name has been dropped, from the roll of members of this Association or of a Component Society, shall not be entitled to any of the rights or benefits of this Association, nor shall he be permitted to take part in any of its proceedings until he has been relieved of such disability."

NOTICE

The Portland Athletic Club extends the privileges of their Club House to the visiting members of the Maine Medical Association, for June 12th and 13th. It is expected that similar courtesies will be extended by the Portland Club and the Portland Country Club.

PERSONAL NEWS AND NOTES.

Dr. A. Woodside, for over twenty years a practising physician in Rockland, died in that city in April, after an illness of three months' duration.

Dr. S. L. Fairchild has taken over the practice in Searsport of Dr. C. R. Hines, who has moved to Boston, Mass.

Dr. E. E. Brown of Bangor and Dr. Upton of Sherman sailed on the "Franconia" on May 14th for Europe. After attending the Clinics in London, they propose to go to Paris and Berlin for further study.

Dr. O. W. Sedgwick is now practising in Unity.

Dr. B. F. Bradbury of Norway, Major Surgeon, 2nd Reg. N. G. S. M., has just completed a six week's course at the Field Service School for Medical officers at Fort Leavenworth, Kansas. The doctor reports a pleasant time but lots of hard work.

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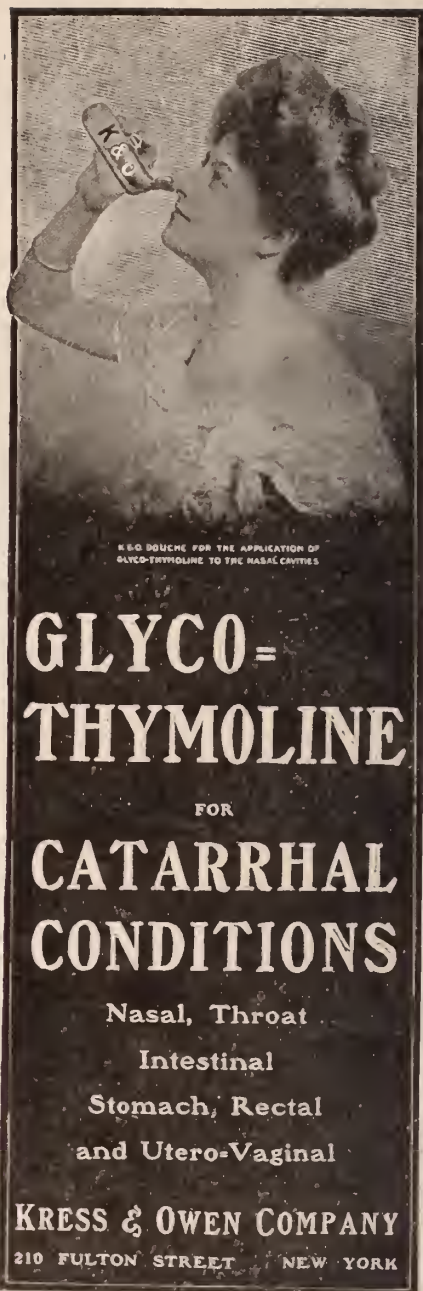
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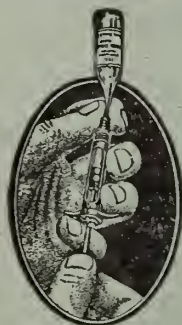
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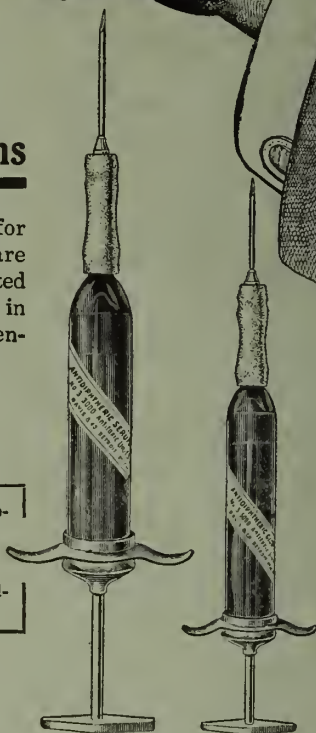
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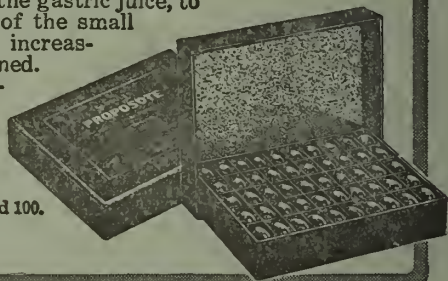
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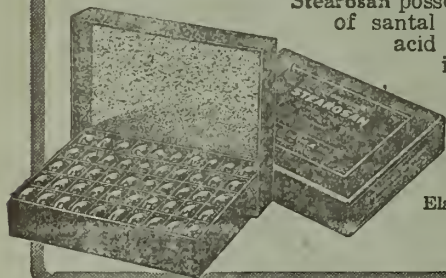
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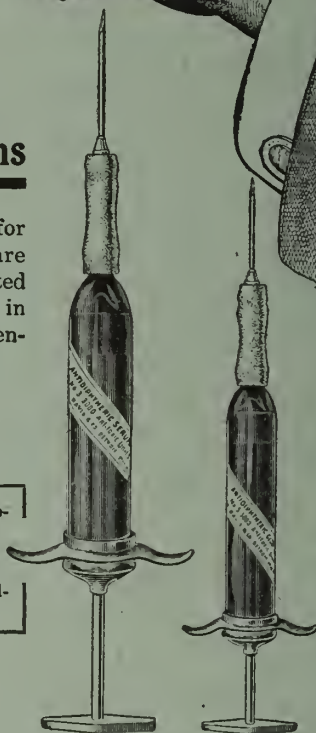
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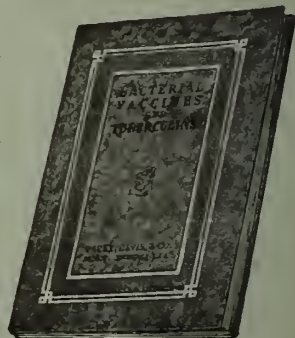
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